

GAO

United States General Accounting Office

Report to the Chairman, Subcommittee on
Military Construction, Committee on
Armed Services,
United States Senate

June 1986

NAVY SHIPS

Information on Benefits and Costs of Establishing New Homeports



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General Accounting Office
Washington, D.C. 20548

Comptroller General
of the United States

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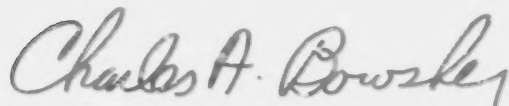
The Honorable Strom Thurmond
Chairman, Subcommittee on Military Construction
Committee on Armed Services
United States Senate

Dear Mr. Chairman:

As requested in your January 16, 1985, letter and in subsequent discussions with your office, this is our report on the Navy's strategic homeporting plan. Our report contains information on the Navy's basis for increasing the number of homeports, the scope and cost of developing the new homeports, and the cost of homeporting the ships in existing homeports versus the cost of homeporting them in new ports.

We are sending copies of this report to the Chairmen, Senate Committee on Governmental Affairs, House Committee on Government Operations, and Senate and House Committees on Appropriations and on Armed Services; the individual Members of the Congress that received our draft report; the Director, Office of Management and Budget; and the Secretaries of Defense and the Navy.

Sincerely yours,



Charles A. Bowsher
Comptroller General
of the United States

Executive Summary

Purpose

The Navy plans to establish several new homeports to help accommodate the additional ships coming into the fleet as it builds to a 600-ship Navy. In response to a request from Senator Thurmond, and other expressed congressional interest in the Navy's strategic homeporting plan, GAO sought to develop information concerning the Navy's basis for increasing the number of homeports, the scope and cost of developing the new homeports, and the cost of homeporting the ships in existing homeports versus the cost of homeporting them in new ports.

Background

The Navy initiated the strategic homeporting plan in 1982 because of concerns that the existing homeporting structure was not optimum from a strategic and military standpoint. The plan calls for adjusting the mix of ships in existing homeports and developing several new homeports. The new homeports would contain 36 ships for two carrier groups and three battleship groups. In addition, the new homeports would include 23 ships for the Naval Reserve Force and five miscellaneous support ships. (See pp. 8 and 9.)

Results in Brief

The Navy plans to establish additional homeports based on five strategic principles and at costs greater than they would be by putting the ships in existing homeports. GAO's analysis of the Navy's cost studies indicate that the Navy's estimates understate the outlays needed to establish new homeports and understate the cost differences between new and existing ports.

GAO believes the Congress needs to be aware of the total budgetary impact of the Navy's strategic homeporting plan. This is particularly important given the prospect for defense budgets with little real growth and the over \$1.8 billion in military construction deficiencies at existing homeports that will have to compete for funds with the Navy's strategic homeporting plan. There will also be additional recurring costs that the Navy has determined will be required to operate and maintain the new homeports as well as existing homeports.

Principal Findings

Navy's Strategic Rationale for New Homeports

The Navy's strategic rationale for the new homeports is that (1) dispersing ships to more ports will improve the U.S. defensive posture and the survivability of the fleet, (2) collocating ships of the same battle group will enhance warfighting coordination, (3) homeporting ships near locations with existing industrial capability will permit the Navy to take advantage of this capability, (4) homeporting ships in more diverse geographical locations will permit the Navy to train in a variety of environments and will reduce the response time to potential conflict areas, and (5) developing additional logistics support complexes will help support the expanded fleet. (See pp. 12 to 20.)

Although benefits will be achieved, concerns have been raised about the degree that they will be realized.

Costs to Establish New Homeports

Navy studies of the costs to establish new homeports are evolving and the most recent estimate of construction costs for initial operating capability at all new homeports is \$799 million. (See p. 24.) The \$799 million does not include

- nonappropriated fund requirements or military family housing cost;
- projects the Navy considers desirable for ultimate port development but which are not critical to initial operating capability;
- other identified costs that GAO believes should be included, but the Navy says are not directly applicable to its homeporting decision or are uncertain at this time;
- financial and other support such as land and infrastructure improvements that state and local governments have pledged; and
- potential costs that may be borne by other federal programs.

The Navy's basic program, for the most part, does not include projects that support the quality of life. And, facilities that appear to GAO to be essential to basic operations, such as a radar tower and a headquarters building, are also not included. These items are included in the Navy's more costly enhanced program. (See pp. 23 to 27.) To the extent that projects essential to ultimate development are omitted from the basic program, the Navy will have to come back to the Congress for additional funds. Enhancements for Staten Island and Everett alone are estimated by the Navy to cost \$222 million over the basic program.

Comparisons Between New and Existing Homeports

Navy studies of military construction, operations and maintenance, and other procurement costs show it will be more costly to establish new homeports than it would be to expand existing ones. (See pp. 40 to 43.) Navy officials have concluded that the cost difference between new and existing ports was relatively small compared to total Navy investment and 5-year budget costs. GAO believes the cost difference should be considered on its own merits. (See p. 44.)

To the extent that the Navy has understated the costs to establish new homeports, it has understated the cost difference between new and existing homeports. This cost difference has been understated even further because of the way the Navy compares the cost for homeporting reserve forces.

Recommendation

In a draft of this report, GAO suggested that the Congress require a demonstration of the strategic benefits and more definitive and complete cost estimates before approving funds for the new homeports. This information is now being brought out during the congressional budget review and hearing process. Therefore, GAO is making no recommendation.

Agency Comments

The Department of Defense transmitted the Navy's official written comments on a draft of this report. Navy disagreed that strategic benefits need to be more clearly demonstrated. Navy noted that the concept and its principles, which were developed in consonance with the Navy's maritime strategy, evolved over a decade of continuous operational assessment of capability and threats of potential adversaries by various elements of the Navy command structure. GAO believes that information on the basis for the strategic homeporting plan has now become available to the Congress through the budget review and hearing process and by GAO. Concerns still exist as to the degree to which benefits of the homeporting plan will be achieved. GAO believes that the fundamental question is whether the benefits are worth the additional costs.

The Navy also said GAO's draft report did not acknowledge information in the Navy's November 1985 military necessity/cost effectiveness study. GAO's report now fully recognizes the Navy's November 1985 study and the Navy's April 1986 analysis of operations and maintenance and procurement costs. GAO believes that the cost studies, although not complete, are positive steps in that they provide the Congress with the type of information it needs for decisionmaking.

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Contents

Executive Summary		2
Chapter 1		8
Introduction	Objectives, Scope, and Methodology	11
Chapter 2		12
Navy's Strategic	Force Dispersal	12
Rationale for New	Battlegroup Integrity	13
Homeports	Industrial Base Utilization	17
	Geographical Considerations	18
	Logistics Suitability	19
	Conclusions	20
	Agency Comments and Our Evaluation	21
Chapter 3		22
Total Budgetary	Development of Navy Cost Estimates	22
Impact of Navy's	\$799 Million Program Does Not Appear to Provide for	23
Strategic Homeporting	Full Initial Operating Capability	
Plan Is Not Clear	Navy Operations and Maintenance and Other	35
	Procurement Costs Understated	
	Navy Identified Costs Not Included in Either the IOC or	36
	Enhanced Program Estimates	
	Other Potential Significant Costs Could Have Budgetary Impact	37
	Conclusions	38
	Agency Comments and Our Evaluation	39
Chapter 4		40
Comparisons Between	Existing Ports Would Be Less Costly Than New Ports	40
New and Existing	Navy's Treatment of Reserve Ships Further Understates	43
Homeports	Cost Differences	
	Navy's Basis for Accepting Cost Difference	44
	Conclusions	45
	Agency Comments and Our Evaluation	45
Appendixes		
	Appendix I: Comments From Assistant Secretary of	46
	Defense (Acquisition and Logistics)	
	Appendix II: Comparisons of Navy Architect and	80
	Engineering Firms' Estimates, Navy IOC Estimates,	
	and Navy Enhanced Program Estimates for Staten	
	Island and Everett	

Appendix III: Navy Estimates of Construction Costs at Staten Island, Everett, and Alternative Ports	84
Appendix IV: Navy Summary Sheet on Operations and Maintenance and Other Procurement Costs at Staten Island, Everett, and Alternative Ports	86

Tables

Table 2.1: Maintenance Cycle for Ships in the Everett Carrier Battlegroup	15
Table 2.2: Summary of Past and Proposed Shiploading by Homeport	20
Table 3.1: Summary of Navy Homeporting Cost Estimates	24
Table 3.2: Navy Estimate to Establish an IOC for West Coast Battleship Group	30
Table 3.3: Navy Estimate to Establish an IOC for Gulf Coast Carrier and Battleship Groups	32
Table 4.1: Reductions in Military Construction Costs for Staten Island Ships	41
Table 4.2: Reductions in Military Construction Costs for Everett Ships	41
Table II.1: Comparison for Staten Island	80
Table II.2: Comparison for Everett	82

Figures

Figure 1.1: U.S.S. Nimitz (Carrier)	10
Figure 2.1: Carrier Battlegroup	16
Figure 2.2: Private Shipyards Doing Navy Work During Fy 1984	17
Figure 3.1: Staten Island Site	26
Figure 3.2: Everett Site	28
Figure 3.3: Treasure Island Site	29
Figure 3.4: Pensacola Site	31
Figure 3.5: Mobile Site	33
Figure 3.6: Pascagoula Site	34
Figure 3.7: Corpus Christi Site	35

Abbreviations

DOD	Department of Defense
GAO	General Accounting Office
IOC	Initial Operating Capability
O&M	Operations and Maintenance

Introduction

The Navy initiated the strategic homeporting plan in 1982 because of concerns that the existing homeporting structure was not optimum from a strategic and military standpoint. It also was concerned about how best to accommodate the additional ships coming into the fleet as it builds to a 600-ship Navy. The plan calls for adjusting the mix of ships in existing homeports and developing several new homeports, and is based on five strategic principles related to (1) battlegroup integrity, (2) force dispersal, (3) industrial base utilization, (4) logistics suitability, and (5) geographical considerations.

In 1973 the Navy consolidated homeports for reasons of economy. At that time, with the number of active ships being reduced from 917 in 1964 to 523 in 1973, the Navy had twice as many homeports as needed for dispersal and operational requirements. Although concerns about reducing the number of homeports had been expressed the Navy stated that these requirements could be met with two homeports on each coast for each class of ships. For example, the number of homeports for carriers was reduced to Norfolk, Virginia, and Mayport, Florida, on the east coast and San Diego, California, and Alameda, California, on the west coast.

Subsequently, the Navy expressed dissatisfaction with the consolidated homeporting structure. In the 1982 strategic homeporting plan, the Navy cited the following shortcomings:

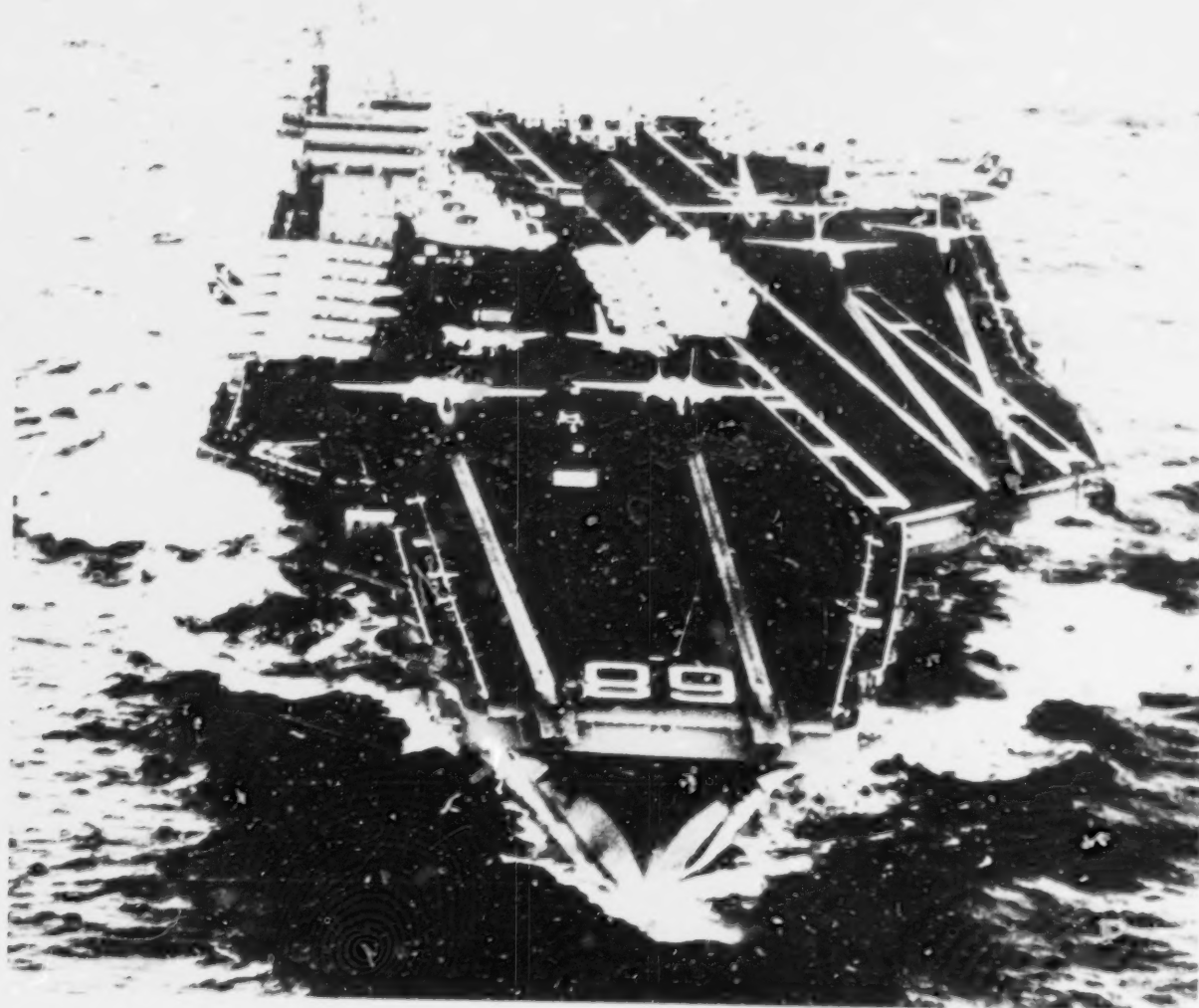
- Excessive fleet concentration in Norfolk and San Diego.
- Carriers homeported without surface combatant escort ships.
- Underused private industrial capacity in the northwest and northeast.
- Insufficient dispersal of forces.
- Insufficient emphasis on battlegroup integrity.

Although the strategic principles have essentially remained the same, since 1982 the Navy has revised the number of homeports and ships involved in the plan. As of November 1985, the plan called for developing new homeports for a battleship surface action group in the northeast, a carrier battlegroup in the northwest, a battleship surface action group and a carrier battlegroup on the gulf coast, and a battleship surface action group on the west coast.

The new homeports will contain 36 ships for the two carrier groups and the three battleship groups. In addition, the new homeports will include 23 ships for the Naval Reserve Force and five miscellaneous support ships. The location of these ships is detailed below.

- Staten Island, New York, for a battleship surface action group consisting of one battleship (U.S.S. Iowa), one cruiser, and three destroyers. In addition, two Naval Reserve Force frigates will be homeported at Staten Island.
- Everett, Washington, for a carrier battle group consisting of one carrier (U.S.S. Nimitz), two cruisers, four destroyers, and two frigates. In addition, two frigates and two mine countermeasure ships for the Naval Reserve Force will be homeported at Everett.
- San Francisco (Treasure Island), California, and two other locations for a battleship surface action group. This group will consist of one battleship (U.S.S. Missouri) and one cruiser at Treasure Island; one cruiser and three destroyers at Pearl Harbor, Hawaii; and four frigates at Long Beach, California. In addition, four frigates and two mine countermeasure ships for the Naval Reserve Force will be homeported at San Francisco (Hunter's Point).
- Nine gulf coast cities for a carrier battle group, a battleship surface action group, and miscellaneous ship homeportings. The carrier group will consist of one carrier at Pensacola, Florida; two destroyers and two frigates at Mobile, Alabama; and two cruisers and two destroyers at Pascagoula, Mississippi. The battleship group will consist of one battleship (U.S.S. Wisconsin), one cruiser, and one destroyer at Corpus Christi, Texas. In addition, one training carrier and one Naval Reserve Force minesweeper will be at Corpus Christi; two frigates and three minesweepers for the Naval Reserve Force will be at Galveston, Texas; one Naval Reserve Force minesweeper will be at Pensacola; one oiler and two minesweepers for the Naval Reserve Force will be at Lake Charles, Louisiana; one Naval Reserve Force minesweeper will be at Gulfport, Mississippi; one landing craft repair ship and one salvage ship will be at Key West, Florida; and two sealift ships will be at New Orleans, Louisiana.

Figure 1.1: U.S.S. Nimitz (Carrier)



Objectives, Scope, and Methodology

In January 1985, Senator Strom Thurmond asked us to compare the cost of expanding existing homeports to handle additional ships with the cost to open new homeports. In response to this request, and other expressed congressional interest in the Navy's strategic homeporting plan, we sought to develop information concerning

- the Navy's basis for increasing the number of homeports,
- the scope and cost of developing the new homeports, and
- the cost of homeporting the ships in existing homeports versus the cost of homeporting them in new ports.

In accomplishing these objectives, we obtained and reviewed various Navy documents, including relevant studies, draft master plans, base requirement statements, berthing plans and criteria, cost estimates, and environmental impact statements. Also, we held discussions with officials from the Office of the Deputy Chief of Naval Operations (Surface Warfare); Office of the Deputy Chief of Naval Operations (Logistics); Naval Facilities Engineering Command; Naval Sea Systems Command; Naval Intelligence Command; Commander-in-Chief, Atlantic Fleet; Commander-in-Chief, Pacific Fleet; and various other Navy offices involved in developing and executing the strategic homeporting plan. In addition, we performed work at existing homeports in Norfolk, Newport, Charleston, Mayport, San Diego, Long Beach, Alameda, and Pearl Harbor. Also, we visited the sites for several of the new homeports including Staten Island, Everett, Corpus Christi, Galveston, and San Francisco (Treasure Island and Hunter's Point).

Our review was made in accordance with generally accepted government auditing standards and was performed between February 1985 and April 1986. During the course of our review, the information and studies supporting the strategic homeporting plan were being refined and updated by the Navy. For example, in November 1985, the Secretary of the Navy submitted a Military Necessity Cost Effectiveness Report to the Chairman, Senate Committee on Armed Services. This report was prepared in response to a committee requirement that the Secretary justify the expenditure of funds for the Staten Island and Everett homeports on the basis of military necessity and cost effectiveness. In April 1986, the Navy provided us a copy of a report entitled Study of Annual Operations and Maintenance/Other Procurement Costs at Alternative Sites. The information in these two reports was used in finalizing our report.

Navy's Strategic Rationale for New Homeports

The Navy's plan to establish additional homeports is based on five strategic principles related to force dispersal, battlegroup integrity, industrial base utilization, logistics suitability, and geographical considerations. In conducting our work, we accepted these principles as a given because they are based on military judgment.

During our review, we obtained and reviewed Navy documents and held discussions with officials from the Office of the Deputy Chief of Naval Operations (Surface Warfare); Naval Sea Systems Command; Naval Intelligence Command; Commander-in-Chief, Atlantic Fleet; Commander-in-Chief, Pacific Fleet; and various other Navy offices involved in developing and executing the strategic homeporting plan. From these interviews and documents, we identified the basis for the Navy's strategic rationale and any major concerns associated with this rationale that we believe warrant the attention of the Congress. This chapter discusses the Navy's rationale for each of the principles as well as the major concerns identified.

Force Dispersal

In the 1982 strategic homeporting plan and supporting documents, the Navy stated that the dispersal of ships to more ports and to less concentrated ports would improve U.S. defensive posture, complicate conventional warfare targeting by a potential enemy, and minimize the risks associated with a relatively simple but properly placed attack.

We found that the Navy's decision to disperse the fleet was not based on a formal threat/survivability analysis that specifically addressed force dispersal. We asked the Deputy Chief of Naval Operations (Logistics), who is responsible for the strategic homeporting plan, why force dispersal would improve the survivability of the fleet. He stated that whatever the nature of the threat the Soviets may choose to use (mining, sabotage, submarines, or conventional cruise missiles), overconcentration of U.S. forces makes the job easier for them.

In this regard, Naval Intelligence Command officials indicated that the conventional threat to U.S. ports is relatively low. They told us that during a crisis, Soviet forces would be assigned higher priority missions than mining or attacking U.S. homeports. Also, Pacific Fleet officials told us that available U.S. intelligence surveillance systems, combined with antisubmarine warfare capability, would make it unlikely that complete mining of a U.S. port could be accomplished. In addition, some of the existing port areas, such as Norfolk, are closed to Soviet ships. On

the other hand, most of the new ports, such as Staten Island, are in commercial port areas that are open to Soviet ships.

In commenting on our draft report, the Navy disagreed that the conventional threat to U.S. ports is relatively low, noting recent Soviet submarine operations and past and planned increases in warfighting abilities. The Navy also noted that only 11 existing ports are closed to Soviet ships and that all other existing ports are open ports, but on a case-by-case basis requiring advance notification for access to the port. The Navy further noted that a recent intelligence assessment of the terrorist threat concluded that the threat to the proposed new homeports was no greater than that to the existing homeports.

We also identified a force dispersal concern about homeporting ships that was dependent on the particular scenario envisioned. Specifically, in an August 12, 1983, letter to the Chief of Naval Operations, the Commander-in-Chief, Atlantic Fleet, stated that strategic flexibility would be decreased by homeporting a carrier battlegroup on the gulf coast instead of on the east coast, given that control of the North Atlantic is the Atlantic Command's most challenging task. He also stated that the added steaming time and potential for damage from hostile actions while transiting the Straits of Florida or the Yucatan Channel could deprive the Navy of a major fighting asset during the early stages of a conflict. He further stated that a carrier battlegroup could deploy to the Caribbean from Mayport, Florida, on the east coast and be on station to defend the southern sea lines of communications in approximately the same response time as ships could be deployed from Pensacola, Florida, on the gulf coast.

In commenting on our draft report, the Navy stated that the former Commander-in-Chief, Atlantic Fleet, recently acknowledged that since his 1983 appraisal the world situation had changed. According to the Navy, Caribbean and Central America threats to U.S. supply lines across the gulf demand attention. The former Commander said that in this environment he would delay a carrier battlegroup from deploying north for at least 30 days to ensure supply lines in the gulf were not in jeopardy. The Navy stated that homeporting in the gulf coast provides enormous flexibility to U.S. military options and significantly increases the potential for reduced response times in some scenarios.

Battlegroup Integrity

The Navy stated that homeporting ships in battlegroup configurations would greatly enhance warfighting coordination by collocating the same

or similar units that would operate together during routine exercises and contingency deployments. The Navy also stated that the opportunity for training, living, and working as a complete battlegroup would contribute significantly to improved readiness and to a better offensive/defensive posture.

Although some battlegroup integrity will be realized, we were made aware of several concerns about the extent that battlegroup integrity will be enhanced by increasing the number of homeports. These concerns relate to ship location, personnel rotation, training, and maintenance cycles.

Our analysis of Navy ship assignment documents showed that many of the existing homeports, such as Norfolk and San Diego, already provide some battlegroup integrity through collocation of ships in the battlegroups. In addition, battlegroups currently are formed prior to deployment to train and work together as a complete group. These battlegroups then undergo a series of joint exercises, approximately 6 months prior to deployment with the fleet.

Also, some of the ships will not be homeported in battlegroup configurations at the new homeports. Ships for the gulf coast carrier battlegroup will be dispersed among three cities. Some of the escort ships for the San Francisco battleship surface action group will be homeported at Long Beach and Pearl Harbor. In commenting on our draft report, the Navy stated that the three cities for the gulf coast carrier group are only 30 to 45 miles apart and are considered to be one homeport region for training and repair efforts. The Navy also stated that although some assigned escort ships for the San Francisco battleship group will not be homeported together, the strategic principles remain valid. According to the Navy, once designated, the battleship group will train, work, and deploy together maximizing interoperability and warfighting coordination. The Navy did not indicate how the strategic principles would be accomplished with escort ships in different ports or how this arrangement differs from the way battlegroups are currently formed.

Another factor adversely affecting battlegroup integrity is personnel rotation. Because personnel will be rotated regularly, crews will not be able to train and work together as a unit much more than they do now. Also, even if new homeports are established, most training likely will continue to take place in existing locations, such as the southern California and Caribbean areas.

In its comments, the Navy stated that normal shipboard tour lengths of three to four years greatly exceed the 18-month deployment cycles and, therefore, individual sailors will experience two or three cycles onboard and operate routinely in the same battlegroup. The Navy also stated that, although training will continue at existing locations, significant amounts of training and exercise will be conducted in the homeport regions. According to the Navy, the opportunity for joint training and operations under the strategic homeporting plan will be enhanced significantly over the current arrangement.

Battlegroup integrity also will be affected by the differing maintenance cycles of ships within a battlegroup. Each type of ship has a distinct recurring maintenance period. These differences occur for both regular overhauls and interim maintenance actions, such as selected restricted availabilities. For example, as shown in table 2.1, the overhaul cycle for ships in the planned Everett carrier group would vary from 2 years for a frigate to 7 years for a carrier.

Table 2.1: Maintenance Cycle for Ships
in the Everett Carrier Battlegroup

Ship type	Overhaul interval	Overhaul duration
Carrier	7 years	12 to 21 months
Cruiser	6-1/2 years	16 to 21 months
Destroyer	5 years	8 months
Frigate	2 years	1-1/2 to 2 months

We asked Atlantic and Pacific Fleet officials for their views on the impact of differing maintenance cycles. They stated that their objective was to establish battlegroup integrity to the extent feasible, but maintenance and other demands may dictate that some ships be replaced by other ships during deployment. The Pacific Fleet Commander elaborated by stating that a carrier or battleship might not deploy with the same escort ships twice in succession. He pointed out that battlegroups would remain intact as much as possible, but the Navy must retain the flexibility to substitute ships when necessary to meet maintenance cycle requirements.

In commenting on our draft report, the Navy indicated that the Pacific Fleet Commander had further stated that strategic homeporting significantly enhances the probability of deploying together in succession over the current situation. Also, the Navy stated that maintenance periods for 1-year overhauls occur at fairly long intervals spanning more than

one-deployment cycle, and that shorter maintenance periods will not significantly affect battlegroup integrity since they generally occur at the same point in the deployment cycle for all ships.

Nevertheless, it appears that retaining battlegroup integrity for more than one-deployment cycle would be difficult, whether under the existing homeport structure or under the expanded homeport structure because of ship location, personnel rotation, training, and maintenance cycles.

Figure 2.1: Carrier Battlegroup

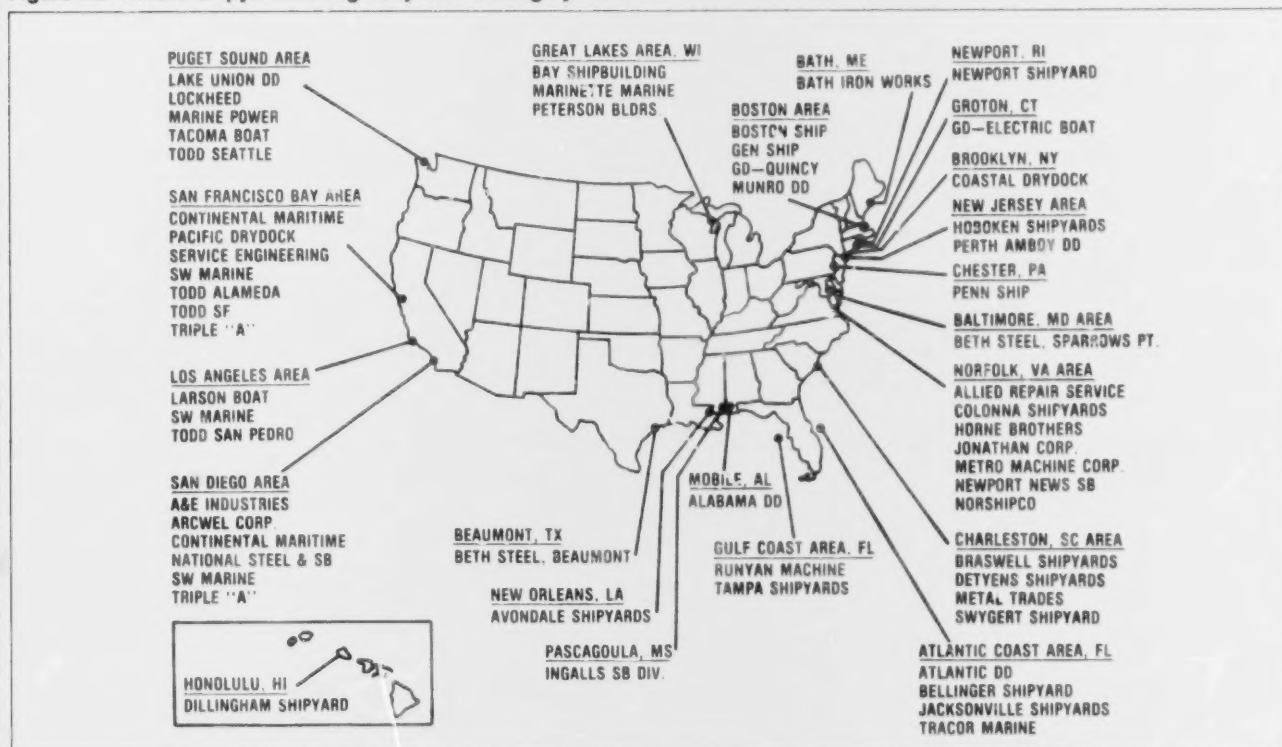


Industrial Base Utilization

The Navy stated that homeporting ships at or near locations with existing industrial capability would permit the Navy to take advantage of this capacity during peacetime and to have the necessary surge capability in place, if needed, during mobilization. The Navy also stated that the strategic homeporting plan will nurture the economic vitality of the industrial support base in more locations, thereby enhancing the Navy's ability to expand rapidly in contingency situations. The Navy further stated that, with the Navy fleet growing, shipyards near existing homeports will not have less work and that increased workload will be more evenly dispersed geographically.

A Navy report entitled Status of the Shipbuilding and Ship Repair Industry of the United States indicates that 58 private shipyards already are doing work for the Navy. As figure 2.2 shows, some of these shipyards are near the new homeports.

Figure 2.2: Private Shipyards Doing Navy Work During Fy 1984



Source: NAVSEA

Because of existing Navy policies, the strategic homeporting plan could increase the repair work to private shipyards in the vicinity of the new homeports. Prior to May 1985, Navy policy provided that at least one-third of the regular overhauls be reserved for a ship's homeport area. In May 1985, this policy was changed to require that planned maintenance actions of more than 6 months be competed coastwide. Planned maintenance actions of 6 months or less continue to be reserved for a ship's homeport area, provided adequate capability, capacity, and competition exist.

Maintenance actions include both overhauls and selected restricted availabilities. Selected restricted availabilities are short, labor-intensive maintenance actions that are required to sustain the condition of ships between overhauls. In recent years, the Navy has been increasing the number of selected restricted availabilities and decreasing the number of overhauls. Since our analysis of Navy maintenance actions showed that selected restricted availabilities normally are planned to take less than 6 months, private shipyards in the homeport areas should receive most of the work.

Geographical Considerations

The Navy stated that homeporting in more diverse geographical locations on both coasts would permit the Navy to train and operate in a variety of environments and would reduce the response time to potential conflict areas.

According to Atlantic and Pacific Fleet officials, most fleet training is conducted in the southern California and Caribbean areas where the Navy already has test facilities and resources. For example, these areas have missile ranges, surface and air gunnery areas, instrumented torpedo ranges, and shore bombardment ranges. The Navy did not indicate any plans to build additional test ranges in the vicinity of the new homeports. Therefore, although some training may be done near the new homeports and thus provide more opportunities for training in diverse environments, it appears that most fleet training will continue to be conducted at existing test ranges. In addition, personnel from the new homeports will have to be sent to existing homeports for specialized training, such as fire fighting, unless training facilities and programs are established at the new homeports.

In its comments, the Navy stated that, although training will continue at existing locations, significant amounts of training and exercises will be

conducted in the homeport regions of the Staten Island and Everett battlegroups. The Navy further stated that the Everett carrier group also will provide mutual training for carrier group ships and Trident submarines homeported in Bangor, Washington.

With regard to response time, our analysis of steaming data provided by the Atlantic and Pacific Fleet Commands showed that the locations of some of the new homeports will reduce the steaming time of ships to potential conflict areas. However, the Secretary of the Navy and officials of the Atlantic Fleet Command stated that battleship and carrier groups normally would not be deployed independently into a potential major conflict area. Therefore, these groups would have to rendezvous with ships from other homeports before proceeding to a major conflict area. Response time could be reduced for less than major conflicts. In commenting on our draft report, the Navy indicated that battlegroups could deploy independently to lesser contingencies and that independent or integrated deployment would depend upon the level of potential enemy threat, availability of land based air support, and other factors.

As for the gulf coast carrier and battleship groups, our analysis of data provided by the Atlantic Fleet showed that the steaming time to Central and South America will not be appreciably less than the steaming time from the existing homeports at Mayport, Florida, and Charleston, South Carolina. The steaming time from the gulf coast ports to the North Atlantic will be greater. This point is important because in 1983 the Commander-in-Chief, Atlantic Fleet, stated that the gulf coast carrier group may be needed in the North Atlantic to ensure Soviet containment, defense of the shipping lanes, and reinforcement of Europe. In its comments, the Navy stated that the former Commander recently said that even if a contingency arose in the North Atlantic, he would retain a carrier group in the gulf for at least 30 days to ensure supply lines in the gulf were not in jeopardy.

Logistics Suitability

The Navy stated that key logistic considerations such as waterfront capacity and accessibility, maintenance availability, and personnel support capability were major factors in determining the potential of specific locations as homeports. The Navy also stated that development of additional logistics support complexes is required to support the expanding Navy and to sustain the forward maritime strategy. While maximizing the use of the existing base infrastructure, the Navy believes it is desirable to provide a core of new dispersed bases to permit

implementation of the other principles of the strategic homeporting plan.

While logistics was a factor in selecting the new homeports, Naval Facilities Engineering Command officials stated that they are still trying to determine how best to provide logistical support. For example, the Atlantic Fleet Command is determining the ammunition, refueling, and maintenance support to be provided the new homeports on the gulf coast.

Although the Navy stated that it wanted to maximize the use of the existing base infrastructure, our review of site selection team reports indicated that it did not study the logistics suitability of existing homeports during the selection process for the new homeports. Our review of Navy data on current and planned ship assignments indicated that the infrastructure of the existing homeports would be used at less than the maximum level. In commenting on our draft report, the Navy stated that significant facility and infrastructure deficiencies exist at all homeports and, therefore, they do not have excess capacity. Further, it said ships homeported in all existing homeports will remain at current levels or increase. We note, however, that most of the existing homeports we studied will have fewer ships assigned under the strategic homeporting plan than are assigned now. (See table 2.2.)

Table 2.2: Summary of Past and Proposed Shiploading by Homeport

Homeport	Ships homeported Sept. 1993	Ships homeported March 1985	Ships to be homeported Sept. 1988	Ships to be homeported Sept. 1993
Norfolk Naval Station	95	98	107	93
Charleston Naval Station	45	46	49	46
Mayport Naval Station	34	35	33	29
San Diego Naval Station	89	88	86	73
North Island Naval Air Station	3	4	4	2
Long Beach Naval Station	23	25	30	33
Alameda Naval Air Station	6	6	6	6

Conclusions

The Navy's strategic homeporting plan is based on five strategic principles related to force dispersal, battlegroup integrity, industrial base utilization, logistics suitability, and geographical considerations. Based on our review of Navy documents and discussions with officials from the Naval Intelligence Command and various other Navy offices, benefits will be achieved; however, there are concerns about the degree that they

will be realized. We believe that the fundamental question is whether the benefits are worth the additional costs.

Agency Comments and Our Evaluation

On April 4, 1986, the Department of Defense (DOD) transmitted the Navy's official written comments on a draft of this report. (See app. I.) The Navy disagreed that strategic benefits need to be more clearly demonstrated through a definitive analysis. The Navy noted that the concept and its principles, which were developed in consonance with the Navy's maritime strategy, evolved over a decade of continuous operational assessment of capabilities and threats of potential adversaries by various elements of the Navy command structure.

The Congress has expressed a strong interest in having additional information about the basis for the Navy's strategic homeporting plan and any major concerns associated with its rationale. Our review was intended to help satisfy this interest. The congressional budget review and hearing process is satisfying the intent of the suggestion made in our draft report; therefore, we are making no recommendations in our final report. In this regard, hearings were held before the House and Senate Armed Services Committees in February and April 1986, respectively.

Total Budgetary Impact of Navy's Strategic Homeporting Plan Is Not Clear

Beginning in July 1983 the Navy announced the establishment of several new homeports. Since then, the Navy has made a progression of estimates of the cost to establish the new ports. In November 1985, the Navy submitted a study to the Congress that identified, among other things, the military construction costs for all new homeports, with detailed project-by-project estimates for Staten Island and Everett—the two most advanced sites.

The Navy says that the total appropriated fund cost to establish an initial operating capability (IOC) at all the new homeports is \$799 million. This funding level does not include

- nonappropriated fund requirements or military family housing because the Navy believes they would be required regardless of where the ships are placed;
- projects that the Navy considers desirable for ultimate site development but not critical to the IOC;
- other identified costs that we believe should be included, but the Navy says are not directly applicable to its homeporting decision or are uncertain at this time;
- direct cost support and other items such as land, off base roads, and quality of life and infrastructure improvements that state and local governments have pledged; and
- potential costs that may be borne by other federal programs that the Navy says will be called upon to assist in building schools and making capital improvements.

In April 1986, the Navy also prepared a study estimating the costs to outfit and operate new homeports in Staten Island and Everett. Our analysis of this study indicates that the Navy's estimates understate the outlays required to achieve an IOC at the two sites.

We believe that the cost of building new homeports as shown in Navy reports does not reflect the total budgetary impact of the homeporting plan. Further, we believe that there likely will be future requests for additional funds for the new homeports since the \$799 million IOC estimate does not provide for all facilities for the ultimate development of the ports.

Development of Navy Cost Estimates

Following the selection of Staten Island and Everett as new homeports, the Navy contracted with architect and engineering firms to develop master plans and construction cost estimates. In preparing the plans, the

firms used the Navy's Facilities Planning Criteria for Navy and Marine Corps Shore Installations manual (NAVFAC P-80) to develop a basic facilities requirements list and a series of projects to satisfy these requirements. The total cost of the master plan for Staten Island was estimated to be \$397 million, while projects at Everett were estimated at \$441 million. These costs, however, were reduced substantially in the Navy's subsequent estimates (see app. II). The Navy says that the architect and engineering firms' estimates were based on unvalidated requirements and that many projects in these estimates are no longer a part of the planned programs at the sites. The west coast and gulf coast sites were not far enough along in their development to have architect and engineering firm studies done.

In a November 1985 report to the Congress entitled Strategic Homeporting: Military Necessity/Cost Effectiveness Report, the Navy provided estimates of military construction costs (\$799 million) for an IOC at all new ports. Though not included in the Navy IOC cost estimate of \$799 million, the report addresses nonappropriated fund requirements and military family housing needs. In addition, the report provides a follow-on program, referred to as "enhanced," that includes projects for Staten Island and Everett that the Navy says are desirable for ultimate site development but are not critical to the IOC and would have to compete with all other projects Navy-wide in the normal programming/budgeting cycle. An enhanced program was not provided for the gulf coast and west coast initiatives.

In April 1986, the Navy also released a study comparing annual operations and maintenance/other procurement costs for Staten Island and Everett and various alternatives to each. The report did not include cost estimates for enhanced programs at these sites, nor did it include operations and maintenance and outfitting cost estimates for the west coast and gulf coast initiatives. Table 3.1 shows a summary of the Navy's homeporting cost estimates.

\$799 Million Program Does Not Appear to Provide for Full Initial Operating Capability

The Navy's \$799 million IOC program does not include facilities needed for the new homeports to be fully functional. Although presented by the Navy as the price to achieve full IOC at all new ports, the \$799 million program does not include the cost of nonappropriated fund construction, military family housing, and certain projects that appear to us to be essential to basic operations.

Chapter 3
Total Budgetary Impact of Navy's Strategic
Homeporting Plan Is Not Clear

Table 3.1: Summary of Navy Homeporting Cost Estimates

Dollars in Millions

Cost elements	Staten Island		Everett		West Coast		Gulf Coast		Total	
	IOC	Enhanced	IOC	Enhanced	IOC	Enhanced	IOC	Enhanced	IOC	Enhanced
Military construction	\$188.0	\$231.8	\$272.0 ^a	\$348.0 ^c	\$85.0	(a)	\$254.0	(a)	\$799.0 ^d	(a)
Nonappropriated fund construction	8.5	13.8	0	29.0	(a)	(a)	(a)	(a)	(a)	(a)
Military family housing	38.4	59.1 ^e	0	0	(a)	(a)	(a)	(a)	(a)	(a)
Total	\$234.9	\$305.0	\$272.0	\$377.0	(a)	(a)	(a)	(a)	(a)	(a)
Operations and maintenance/other procurement	\$18.2 ^f	(a)	\$15.1 ^f	(a)	(a)	(a)	(a)	(a)	(a)	(a)

^aNo cost estimate provided by the Navy as of May 1986.

^bDoes not include as much as \$120 million for 1,200 additional family housing units.

^cDoes not include as much as \$65 million for ordnance facilities and \$27 to \$52 million for an access road.

^dDoes not include more than \$150 million in direct cost support and other items such as land, off base roads, and quality of life and infrastructure improvements that state and local governments have pledged to provide.

^eDoes not include an unidentified amount for the potential costs that may be borne by other federal programs.

^fDoes not include \$15.2 million and \$15.1 million, respectively, for the outlays required to outfit each site. The Navy estimates are annual recurring costs.

Staten Island

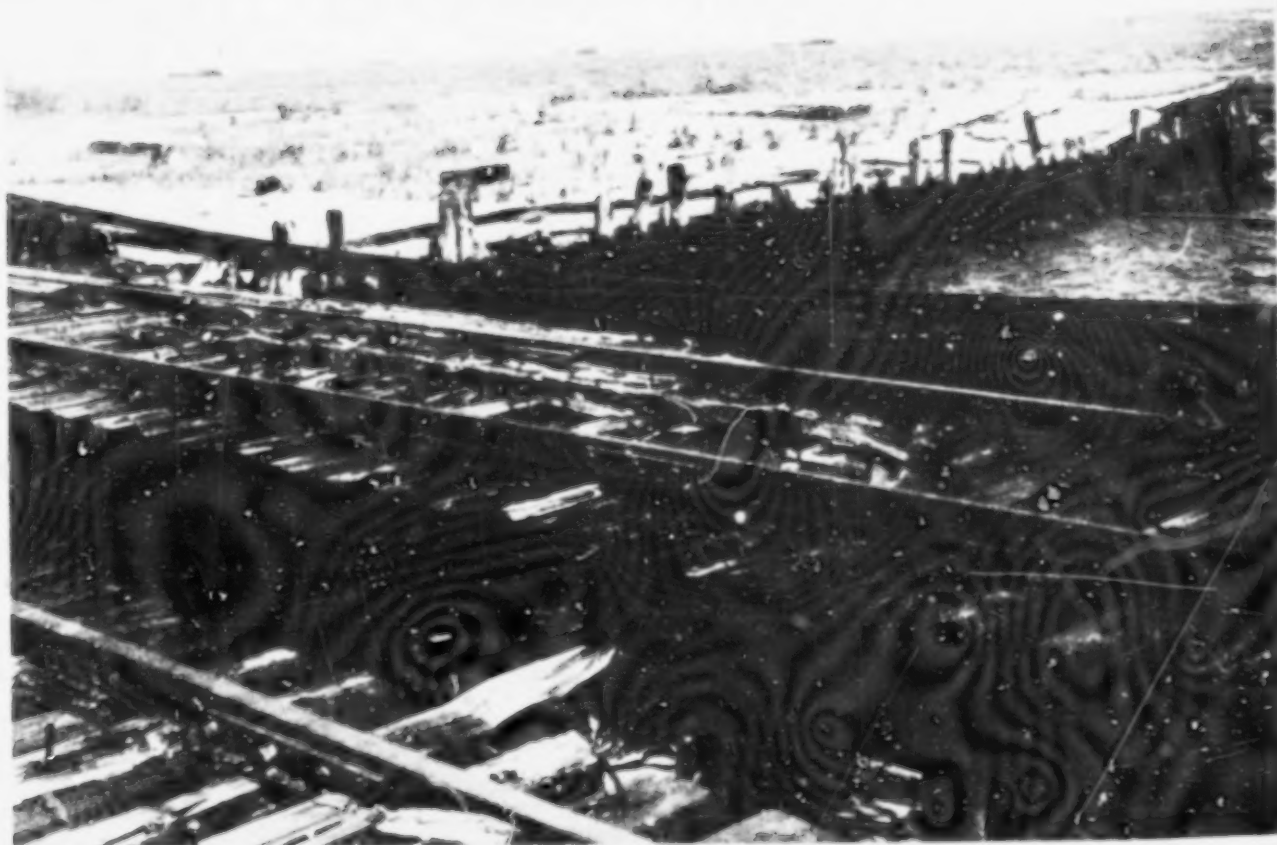
The Navy's IOC program does not include a (1) headquarters building, (2) construction battalion unit facility, and (3) public works facility. These items, which the Navy classified as enhancements, appear to us to be essential to basic operations. According to Navy estimates, these items could cost approximately \$14 million. The Navy says that enhancements include projects that are desirable for ultimate site development but are not required for the IOC and would have to compete for funding with other Navy construction requirements.

The IOC program also excludes \$21.7 million for outdoor recreation facilities, a physical fitness center, and other morale and welfare projects, which the Navy describes as enhancements. It seems likely to us that the Navy would give these items funding priority in future budgets as the

absence of such morale boosting items would tend to detract from current efforts to improve morale and increase retention. We note that the Secretary of the Navy's fiscal year 1986 report to the Congress on the military posture of the Navy and Marine Corps cited the restoration of morale as one of the elements that has contributed to Navy advancements over the last five years.

Although the Navy's November 1985 cost study identified \$38.4 million for 420 units of housing and \$8.5 million for nonappropriated fund requirements to achieve IOC at Staten Island, these costs are not included in the \$799 million total IOC advanced by the Navy. The Navy says that these costs were not included in the IOC because additional housing would be required regardless of where the ships are placed.

Figure 3.1: Staten Island Site



Everett

The largest single project excluded from the \$272 million IOC estimate was a central wharf, which cost \$40 million, and which eventually will be needed to help berth the 13 ships that are to be homeported at Everett. According to the Navy's November 1965 study, all 13 ships cannot be homeported without this wharf. The exclusion of the wharf, along with other items, from the IOC estimate for Everett understates the cost of the new homeport.

The IOC program also does not include the cost of a barge facility, training complex, radar collimation tower, telecommunication center, and medical/dental facility. These items, which would appear to be critical to basic operations, are included in the enhanced program at a cost of \$18.6 million. In addition, \$22.1 million needed to construct recreational and other morale boosting facilities are not included in Navy's IOC budget. In fact, no community/personnel support cost is included in the Navy's IOC estimate.

Figure 3.2: Everett Site



West Coast Battleship Group

Selection of San Francisco (Treasure Island) and two other locations (Long Beach and Pearl Harbor) as the homeports for a battleship surface action group was announced in June 1985. At the time of our review, the comprehensive planning and engineering support services associated with establishing the homeports was in the early stages.

Chapter 3
Total Budgetary Impact of Navy's Strategic
Homeporting Plan Is Not Clear

Therefore, the cost estimates are not as detailed as those for Staten Island and Everett.

Figure 3.3: Treasure Island Site



In November 1985, the Navy estimated that it would cost \$85 million to establish an IOC for the west coast battleship group. (See table 3.2).

**Table 3.2: Navy Estimate to Establish
an IOC for West Coast Battleship Group**

Dollars in millions

Location	Cost
San Francisco (Treasure Island and Hunter's Point)	\$67
Long Beach	12
Pearl Harbor	6
Total	\$85

The above estimate is preliminary and is still being refined. Therefore, we cannot comment on the reasonableness of the estimate. Also, operation and maintenance and procurement costs will have to be determined.

Gulf Coast Carrier and Battleship Groups

Selection of several gulf coast ports as homeports for a carrier battle group and a battleship surface action group was announced in July 1985. The Navy plans to contract with an architect and engineering firm to provide the comprehensive planning and engineering support services associated with the establishment of the homeports.

Figure 3.4: Pensacola Site



The Navy's November 1985 study estimated that it would cost \$254 million (see table 3.3) to establish an IOC for the gulf coast carrier and battleship groups. This estimate is preliminary and is still being refined. Therefore, we cannot comment on the overall reasonableness of the estimate.

Chapter 3
Total Budgetary Impact of Navy's Strategic
Homeporting Plan Is Not Clear

**Table 3.3: Navy Estimate to Establish
an IOC for Gulf Coast Carrier and
Battleship Groups**

Dollars in millions	
Location	Cost
Corpus Christi	\$ 85
Pensacola	25
Pascagoula	57
Mobile	33
Galveston	34
Lake Charles	20
Gulfport	0
Key West	0
New Orleans	0
	\$254

Figure 3.5: Mobile Site



Figure 3.6: Pascagoula Site



Figure 3.7: Corpus Christi Site



Navy Operations and Maintenance and Other Procurement Costs Understated

In April 1986 the Navy prepared detailed operations and maintenance (O&M) and other procurement cost estimates for Staten Island and Everett. The summary analysis for Staten Island and Everett shows annual O&M and other procurement costs at about \$18.2 million for Staten Island and \$15.1 million for Everett. The Navy's O&M cost estimates were projections based on loc construction costs at Staten Island and Everett. In general, to the extent that loc construction costs are understated, as discussed in the preceding section, O&M costs are also understated. The Navy's summary analysis shows outfitting costs to be

\$1.8 million at each location. The Navy arrived at these figures by annualizing the cost to outfit the new ports over 7- and 10-year periods. Detailed cost estimates accompanying the summary statement show, however, that it will cost about \$17.1 million to outfit Staten Island and \$16.9 million for Everett. In essence, first year O&M and outfitting costs would be about \$33.3 million at Staten Island and \$30.2 million at Everett.

Navy Identified Costs Not Included in Either the IOC or Enhanced Program Estimates

The largest construction cost not included in the Navy's estimates for Everett relates to expansion of regional ordnance storage and maintenance facilities to support the carrier group. The Navy's preliminary regional plan for the Puget Sound naval complex, dated April 1985, stated that the Everett carrier battlegroup will increase the demand for ordnance at the complex's Indian Island ordnance facility. The plan lists 17 facility improvement projects, totaling more than \$65 million, to support the battlegroup.

The Navy, in its comments on a draft of this report, stated that costs associated with upgrading ordnance facilities at Indian Island are based on current and projected Pacific Fleet ordnance storage and maintenance missions. With the addition of another carrier on the west coast, more ordnance storage and maintenance facilities are required. Additional facilities will be required whether the carrier group is homeported in Everett, San Francisco, Long Beach, or San Diego. New facilities would be required at the respective ordnance storage and maintenance activities servicing the homeport site. According to the Navy, while this is a carrier-group related expense, it is not accruable to the Everett homeporting because it would be a cost regardless of where the carrier group is homeported.

We believe the Everett cost estimate should reflect this requirement because it is a cost associated with establishing operations at this location. We agree that additional ordnance could be required irrespective of where the new carrier is homeported, but the key question is whether it could be provided at a lower cost at existing ports that already homeport carriers.

The second major item omitted from both estimates is the cost of an off base highway needed for reasonable access to the Everett homeport. According to Navy documents, the access road could cost from \$27 million to \$52 million, depending on whether a tunnel option is adopted. According to these documents, access to the new port would be severely

impeded without roadway improvements. The Navy, in commenting on a draft of this report, stated that the local government had identified \$9 million for off base roadways and that additional state funding is being pursued.

Another item excluded from the Navy's estimates is the cost to construct family housing units at Staten Island over and above those included in the Navy's enhanced program. A November 1984 Navy housing study stated that over 90 percent of the personnel seeking housing near the Staten Island homeport would encounter great difficulty or be unable to find affordable private housing. The Navy's enhanced program shows a requirement for 620 family housing units at a cost of \$59.4 million. The Navy's draft master plan (prepared by an architect and engineering firm) shows possible total family housing requirements at 1,820 units.

If the cost of the already programmed housing units is representative, the total additional cost could be \$120 million (for 1,200 units). The Navy stated that housing requirements for each site were based on a comprehensive assessment requested by the Chief of Naval Operations and that programming of additional family housing construction is dependent upon future experience with the availability of private sector housing in the region since it is DOD policy to rely on the community for the provision of housing. The Navy also stated that some housing deficiencies may be satisfied through long-term leasing.

Other Potential Significant Costs Could Have Budgetary Impact

The Navy has excluded construction costs for off base facilities because it believes funds are available through existing federal programs for impact aid to local governments. In addition, to the extent that pledges from state and local governments for direct support—cash, land, capital improvements, and infrastructure development—do not materialize, the Navy may have to absorb these costs.

In commenting on a draft of this report, the Navy stated that off base projects, such as schools and infrastructure improvements, could be funded through existing federal programs for impact aid to local communities—though local/state mitigation efforts are required before any federal assistance would be provided. Further, federal impact aid under Public Law 81-815 would also be available for school construction. This law provides funds for construction of on base elementary and secondary schools. The Navy also stated that the city of Everett and Snohomish County have pledged \$6 million for park and recreation

improvements and \$6.7 million for capital improvements to library, police, judicial, and public works facilities.

In addition, local school districts could be eligible for per capita funding under Public Law 81-874. Programs under this law provide financial assistance to local school districts where (1) the federal government has acquired substantial real property, (2) children of federal employees reside, or (3) sudden and substantial increases or decreases in school enrollments have occurred as the result of federal activities. To the extent that federal funds are required for these programs, they represent an additional budgetary cost for the new homeports.

Some costs were not included in the Navy's IOC or enhanced program estimates because state and local governments have pledged funding support. These pledges include more than \$150 million in cash and other items such as land, waterfront work, infrastructure improvements, quality of life facilities, and access roads. Testimony before the Senate Committee on Armed Services, Subcommittee on Military Construction, on April 11, 1986, indicates that some of the local governments may have problems with their commitments. The Navy stated that it is working out these problems with the local governments.

We note there are some federal economic and community development programs that provide assistance to state/local governments for infrastructure improvements. To the extent that federal funds are involved in these pledges, although it is impossible to say how much, they represent a potential budgetary cost. To the extent that one or more of the pledges do not materialize, the budgetary cost would be even greater.

Conclusions

The Navy's cost estimates for its strategic homeporting plan are evolving and its November 1985 and April 1986 costs/ alternatives studies are a step in the right direction. We believe, however, that the latest Navy estimates understate the cost to establish new homeports. The \$799 million figure for initial operating capability at the new homeports does not include all identified costs. Specifically, family housing requirements, nonappropriated fund construction, and operations and maintenance and outfitting costs are not included in this figure.

The Navy has testified that the IOC estimate provides for a rather austere program. For the most part, projects that support the quality of life in the workplace and living areas are not provided in the IOC program. Also, facilities that appear to be essential to base operations such as a

radar tower and headquarters building are omitted. These items are included in the Navy's more costly enhanced program. We believe that the Navy's enhanced program, though not necessarily complete, is more representative of the budgetary impact for construction of new homeports. And, to the extent that projects are omitted from the IOC program, the Navy will have to come back to the Congress for additional funds. Enhancements for Staten Island and Everett alone are estimated to cost \$222 million over the IOC estimate. The enhanced programs for the gulf coast and west coast homeports have not been prepared.

Additionally, the Navy's estimates do not reflect the budgetary impact of its homeporting decision on federal impact aid and economic and community development programs. Although difficult to quantify, federal funding in support of off base state/local capital and infrastructure improvements, and school construction and operating costs could have a substantial budgetary impact.

Agency Comments and Our Evaluation

The essence of the Navy's comments on our draft report is that the report did not acknowledge information in the Navy's November 1985 military necessity/cost effectiveness study. The Navy reaffirmed its position that an IOC can be accomplished at all of the new homeports for \$799 million in military construction costs.

Our report now fully recognizes the Navy's November 1985 study. We believe that the cost of building new homeports as shown in the Navy's study does not reflect the total budgetary impact of the homeporting plan. Further, we believe that there likely will be future requests for additional funds for the new homeports since the \$799 million IOC estimate does not provide for all facilities for the ultimate development of the ports.

Comparisons Between New and Existing Homeports

The Navy, in its November 1985 and April 1986 studies, made comparisons of costs between the alternatives of establishing new homeports at Staten Island and Everett and expanding existing ones. The Navy studies showed it would cost more to establish new homeports, and our analysis showed that the cost differences were understated. The Navy determined that the cost difference between new and existing ports was relatively small compared to total Navy investment and 5-year budget costs and were outweighed by the strategic and tactical benefits of new homeports. We believe that the cost difference should not be compared to total Navy investment and budgets, but should be considered on its own merits, recognizing that these budget requirements would have to compete for funding with other requirements.

Existing Ports Would Be Less Costly Than New Ports

The most current Navy estimates of costs associated with the strategic homeporting concept show that it would be less costly to expand existing homeports than it would be to establish new ones. The estimates are contained in the Navy's November 1985 military necessity/cost effectiveness study and in its April 1986 study of annual operations and maintenance/ other procurement costs. As discussed in chapter 3, these studies focus on the estimated cost to construct, outfit, and operate new homeports in Staten Island and Everett. Both studies also estimate the costs to expand various existing ports to accommodate the ships which are planned for new ports at Staten Island and Everett.

Alternatives to Staten Island and Everett

The Navy estimated what it would cost to expand the existing ports of Newport, Norfolk, Charleston and Charleston/Patriot's Point as alternatives to Staten Island. Alternate locations considered for Everett were San Francisco, Long Beach, and San Diego. With the exception of Charleston, which would require bridge construction at a cost of \$400 million, all of the alternatives were determined to be less costly than the planned locations. Appendix III contains the Navy's estimates of all military construction costs at Staten Island, Everett, and the alternate ports for the basic and enhanced programs.

Potential Savings in Military Construction Costs

Tables 4.1 and 4.2 use the Navy estimates to illustrate the range of savings in military construction costs that could occur if the ships planned for Staten Island and Everett were placed at existing ports. As noted in chapter 3, these estimates are understated in several aspects; therefore, the reductions in military construction costs cited in these tables would be even larger.

**Table 4.1: Reductions in Military
Construction Costs for Staten Island
Ships**

Dollars in millions

	If placed at		
	Newport	Charleston/ Patriot's Point	Norfolk
Basic program			
Without family housing and nonappropriated funds	\$18.3	\$47.5	\$89.3
With family housing and nonappropriated funds	35.6	74.5	118.4
Enhanced program			
Without family housing and nonappropriated funds	41.2	86.4	131.4
With family housing and nonappropriated funds	50.3	114.8	164.4

**Table 4.2: Reductions in Military
Construction Costs for Everett Ships**

Dollars in millions

	If placed at		
	San Diego	Long Beach	San Francisco
Basic program			
Without family housing and nonappropriated funds	\$178.6	\$215.9	\$170.5
With family housing and nonappropriated funds	38.9	84.2	19.4
Enhanced program			
Without family housing and nonappropriated funds	206.5	202.4	188.0
With family housing and nonappropriated funds	122.6	93.5	35.0

Navy's comparisons of cost differences between new and existing homeports have focused on the basic program with family housing and nonappropriated fund costs. For the reasons discussed in chapter 3, we believe the more realistic estimate of total cost for the homeporting initiatives is the enhanced program, including family housing and nonappropriated fund costs. When those figures are used for comparison, the range of total savings by expanding existing ports, rather than establishing new ones, is \$85.3 to \$287 million. Norfolk would provide the least costly alternative to Staten Island, with a savings of \$164.4 million; San Diego, the least costly alternative to Everett, would save \$122.6 million.

Operations and Maintenance and
Other Procurement Costs

The Navy's estimates of annual O&M and other procurement costs also show that it would be less costly to outfit and operate expanded facilities at existing ports than to establish new ones at Staten Island and Everett. Appendix IV contains the Navy's April 1986 estimates of annual costs for Staten Island, Everett, and the alternate existing ports.

As shown by these estimates, placing ships planned for Staten Island at either Newport, Norfolk, or Charleston/ Patriot's Point would save about \$9.8 million, \$11.7 million, and \$9.9 million, respectively. The estimates also show that placing ships planned for Everett at either San Diego, Long Beach, or San Francisco would save about \$6.7 million, \$5.6 million, and \$0.3 million, respectively. Similar to the estimates for military construction cost, Norfolk and San Diego provide the least costly alternatives to Staten Island and Everett for O&M and other procurement costs.

Alternatives to Gulf Coast
and West Coast

The Navy's November 1985 military necessity/cost effectiveness study and its April 1986 study of annual operations and maintenance and other procurement costs only compute the cost differences for establishing new ports at Staten Island and Everett.

According to the November 1985 report, there are no less costly alternatives to the strategic homeporting plan for the gulf and west coast initiatives. The report and the study do not include detailed cost comparisons to support this conclusion.

The November 1985 report does state that the lowest estimated comparable cost for homeporting ships planned for the gulf coast in existing east coast homeports is \$289.6 million. Since this exceeds the Navy's estimate of \$254 million for the gulf coast, due to \$130 million in state/local funding offsets, the report concludes there is no cost difference to establish new ports.

The November 1985 report also states that various options for homeporting the ships planned for the west coast were analyzed. According to the report, cost estimates for homeporting a battleship surface action group ranged from \$74 million to \$124 million in fiscal year 1985 dollars. Since the Secretary of the Navy's announced homeporting plan included the lowest cost option of \$74 million, the report concludes there is no cost difference for this initiative.

As noted in chapter 3, the Navy's estimates to establish IOC for the gulf and west coast initiatives are preliminary and are still being refined. Also, the estimates do not include any costs for nonappropriated fund construction, military family housing, or projects for an enhanced program. To the extent that these projects are identified by the Navy and included in estimated costs, the conclusion that there are no less costly alternatives may be affected. We believe cost comparisons between new and existing ports should be based on estimates for the enhanced program, including family housing and nonappropriated fund activities.

Navy's Treatment of Reserve Ships Further Understates Cost Differences

Chapter 3 identified specific examples of costs associated with homeporting that were not included in the Navy's estimates for Staten Island and Everett. These costs represent projects and applicable operating costs that were included in the enhanced program, rather than in the IOC, as well as others that were not included in either estimate. Also, estimated construction costs for the gulf and west coast initiatives do not identify family housing, nonappropriated fund, and enhanced program projects. We believe the Navy's estimates of costs differences between establishing new homeports and expanding existing ones are understated to the extent that these projects have been excluded.

Also, by adding the costs to establish homeports for reserve ships that would remain in New York and Everett in the estimates for expanding existing ports, the Navy has overestimated the cost of existing ports by \$67.2 million. This further understates the cost difference between new and existing homeports.

The homeporting plans for Staten Island and Everett each include a provision to accommodate Naval Reserve Force ships with the battlegroups. According to the Navy, the decision to homeport the Naval Reserve Force ships is independent of the decision to homeport the battlegroups. If the battlegroups were homeported elsewhere, the Navy says homeports for the reserve ships will still be established in New York and Everett to provide training opportunities for reservists who live in the vicinity.

When the Navy computed the costs of establishing new homeports at Staten Island and Everett, the reserve ships were treated as part of the battlegroups and the Navy said that the estimates included facilities necessary to support reserve ships. The Navy's November 1985 study did not separately identify the portion of its cost estimates for Staten Island and Everett that is attributable to the reserve ships.

When the Navy estimated what it would cost to expand existing ports to accommodate the battlegroups planned for Staten Island, it added \$55.2 million to each alternative. This amount represents the Navy's estimate of military construction costs required to establish a homeport for the two reserve ships in New York. Similarly, each alternative of expanding an existing west coast port to accommodate the battlegroup planned for Everett includes an additional \$12 million in military construction projects for homeporting reserve ships at Everett. We believe collocating reserve ships with the battlegroups may be a benefit of new ports but the absence of the benefit is not an added cost of the alternatives.

Navy's Basis for Accepting Cost Difference

Navy officials have concluded that strategic homeporting is sound and affordable as part of bringing the 600-ship Navy on line. In the Navy's judgment, the strategic and tactical advantages of new ports make the investment worthwhile.

The November 1985 study contains a general discussion on affordability/cost effectiveness. In that discussion, the range of cost differences—\$55.0 million to \$217.3 million—for the basic program, including family housing and nonappropriated funds, is used to show that new homeports are "slightly more costly." The cost difference, which is based only on Staten Island and Everett, is then justified by comparing it with the

- investment already made in establishing and operating a Navy,
- Navy's total Five Year Defense Plan, and
- Navy's Military Construction Five Year Defense Plan.

In the first comparison, the Navy concludes the increased cost is relatively small when viewed from the perspective of enhanced operational capability for a given investment in readiness and survivability. Using the upper limit in the range of cost differences for the basic program, the Navy concludes that the \$217.3 million increase is a fraction of one percent of the Navy's 5-year plan and less than two percent of the military construction portion of that plan. The Navy report adds that "the saving of only one major ship and her crew to fight another day more than offsets the marginal cost of this major initiative."

While each of the comparisons shows the cost differences to be relatively small compared to the Navy's total investment and 5-year budget costs, we do not believe such comparisons are appropriate.

Conclusions

The most recent Navy studies show that it is less costly to accommodate the battlegroups at existing homeports than to establish new homeports for Staten Island and Everett. Our analysis showed that the studies have understated the cost differences by overstating the cost to expand existing ports and understating the cost of establishing new ports.

We believe the Congress needs to be aware of the total budgetary impact of the Navy's strategic homeporting plan. This is particularly important, given the prospect for defense budgets with little real growth and the over \$1.8 billion in military construction deficiencies at existing homeports that will have to compete for funds with the Navy's strategic homeporting plan. There will also be additional recurring costs that the Navy has determined will be required to operate and maintain the new homeports as well as existing homeports.

Agency Comments and Our Evaluation

In its comments on a draft of this report, the Navy said that we did not acknowledge the November 1985 study which compares cost estimates for new homeports with those for expanding existing homeports. Our final report fully acknowledges the information in the Navy's November 1985 military necessity/cost effectiveness study.

Comments From Assistant Secretary of Defense (Acquisition and Logistics)

Note: GAO comment supplementing those in the report text appear at the end of this appendix.



ACQUISITION AND
LOGISTICS
I/IP

ASSISTANT SECRETARY OF DEFENSE

WASHINGTON, D.C. 20301-8000

4 APR 1986

Mr. Frank C. Conahan
Director, National Security and
International Affairs Division
U.S. General Accounting Office
441 G. Street, N.W.
Washington, D.C. 20548

Dear Mr. Conahan:

This is the Department of Defense (DoD) response to the General Accounting Office (GAO) draft report entitled "Navy Ships: Plans to Establish New Homeports," dated February 10, 1986 (GAO Code 394079/OSD Case 6942).

Strategic homeporting is a well established concept in the Department of Defense. Within the DoD, the Department of the Navy has been responsible for developing the concept and supporting analyses. Based upon its analysis of this draft report, the Navy has prepared the following comments and the detailed response set forth in the enclosure.

GAO criticized the Navy for not conducting a definitive analysis as to how the strategic principle of force dispersal would be achieved and the degree to which the benefit would be realized. The Navy determined that, while modeling techniques exist for various wargaming strategies, they would be neither valid nor conclusive to quantify the benefits of the strategic homeporting concept since the analysis is extremely scenario dependent. The concept and its principles, which were developed in consonance with the Navy's maritime strategy, evolved over a decade of continuous operational assessment of capabilities and threats of potential adversaries by various elements of the Navy command structure.

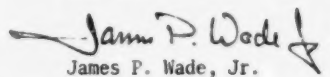
The Navy has conducted an extensive analysis of the capabilities of its existing ports, and does not agree with the GAO conclusion that existing homeports have excess capacity to accommodate the expanded fleet and that only pier construction would be required if additional ships were homeported in battlegroup configuration. Existing homeports have substantial military construction deficiencies, and any increase in population would require increasing the size of the base structure to provide the necessary support. Further, the GAO method of determining berthing capacities of existing homeports did not consider such important items as hull sizes, pier configurations, cold iron utilities, maintenance considerations, and yard craft/visiting ships.

Appendix I
Comments From Assistant Secretary of
Defense (Acquisition and Logistics)

Contrary to GAO's conclusion, the Navy did develop an estimate of the total costs of its homeporting plan. The Navy military necessity/cost effectiveness report submitted to Congress on November 8, 1985 (a copy was provided the GAO team on November 15, 1985) identified construction required for initial operating capability as requested by the Conferees, as well as all other construction costs that must compete with other Navy construction requirements.

A number of factual inaccuracies in the report were brought to the attention of your staff on March 12, 1986. Thank you for the opportunity to comment on the report in draft form.

Sincerely,


James P. Wade, Jr.

Attachment

Appendix I
Comments From Assistant Secretary of
Defense (Acquisition and Logistics)

DEPARTMENT OF DEFENSE COMMENTS

FINDING A: Navy's New Strategic Homeporting Plan: Rationale. The GAO reported that the Navy, in 1982, initiated the Strategic Homeporting Plan because of two major concerns—i.e., (1) the existing homeporting structure was not optimum from a strategic and military standpoint, and (2) the need to accommodate the additional ships coming into the fleet as it builds to a 600 ship Navy. The GAO further reported that the plan calls for adjusting the mix of ships in existing homeports and developing several new homeports; and is based on five strategic principles related to: (1) battlegroup integrity, (2) force dispersal, (3) industrial base utilization, (4) logistics suitability, and (5) geographical considerations. The GAO observed that the new homeporting plan to increase the number of homeports is different from the position taken by the Navy in 1973, when it consolidated homeports for reasons of economy. At that time, the Navy stated that with the number of active ships being reduced from 917 in 1964 to 523 in 1973, it had twice as many homeports as needed for dispersal and operational requirements, and these requirements could be met with two homeports on each coast for each class of ship. The GAO found that subsequently, however, the Navy expressed dissatisfaction with the consolidated homeporting structure and in its 1982 Strategic Homeporting Plan, cited the following shortcomings:

- Excessive fleet concentrations in Norfolk and San Diego;
- Carriers homeported without surface combatant escort ships;
- Underutilized private industrial capacity in the northwest and northeast;
- Insufficient dispersal of forces; and
- Insufficient emphasis on battlegroup integrity.

The GAO reported it is the Navy's position that increasing the number of homeports will bring about improvements in the areas of concern.
(p; 1-11, pp. 1-4, GAO Draft Report)

DOD RESPONSE: Partially Concur. Although GAO accurately relates Navy's rationale for its Strategic Homeporting Concept, its comment that the Navy's plan to increase the number of homeports is different from the position taken by the Navy in 1973 when it consolidated homeports, implies that current and past Navy positions are inconsistent. On the contrary, the Navy's testimony to Congress in 1973 evidences no such inconsistency. Senior Navy officials testified that due to drastic reductions in the size of the fleet (976 to 479 ships) the related shore establishment (65 homeports) had to be brought in line. In fact, the Navy now has only 34 homeports but is growing back up to 609 ships.

Navy officials further testified ... "The base realignment package is to bring into closer balance the shore establishment and level of operating forces. This balance, however, is one of judgment and must be kept under constant review... The proposed consolidation represents the minimum dispersal requirement for the reduced fleet." In response to a question whether the consolidation "enhanced the security of the country ... or have we injured it?" Admiral ZUMWALT stated ... "Yes Sir, we have injured it." [Underscoring added]

Enclosure

Appendix I
Comments From Assistant Secretary of
Defense (Acquisition and Logistics)

More recently in response to a letter from Senator Thurmond requesting his professional opinion on the military merits of the Navy's Strategic Homeporting Concept, Admiral ZUMWALT stated ... "As CNO from 1970-1974 during a period when the anti-war, anti-military mood of the United States public was leading to drastic reductions in defense, it was my sad duty to preside over the elimination of a number of bases around the country ... As I testified during those years the loss of these bases was harmful to Navy readiness ... I strongly support the decision of present Navy management to disperse the now growing fleet to more ports. There is no question but what spreading our fleet over a larger number of homeports will reduce ship vulnerability, enhance battlegroup integrity, avoid overcrowding, exploit and enhance our industrial base, improve active and reserve recruiting and in some cases, move our ships closer to operating areas ... As the Soviet Navy continues to increase the number of submarines it maintains within short striking distance of our ports, the need for additional dispersion of our ships has increased ... In my judgment, the hundreds of millions of dollars that must be appropriated ... are fully warranted by the military benefits to be derived."

FINDING B: Strategic Homeporting Plan: Force Dispersal.

According to the GAO, the Navy claimed that the dispersal of ships to more ports and to less concentrated ports will improve its defensive posture, complicate conventional warfare targeting by a potential enemy, and minimize the risks associated with a relatively simple, but properly placed attack. The GAO found, however, that the Navy decision to disperse the fleet was not based on a formal threat/survivability analysis specifically addressing force dispersal. The GAO concluded that without this analysis, it is difficult to determine whether the threat is sufficient to warrant the cost of dispersal of the fleet. In this regard, the GAO reported that, according to Navy officials, the conventional threat to U.S. ports is relatively low. The GAO also observed that, while many existing homeports are closed to Soviet ships, most of the new ports are open to Soviet commercial ships. The GAO concluded, therefore, that the new homeports could be exposed to possible mining and sabotage, and this would drive up port security costs. In addition, the GAO reported that the Atlantic Fleet Commander-in-Chief stated strategic flexibility would be decreased by homeporting a carrier battlegroup in the planned Gulf Coast port, instead of at an East Coast port, given that control of the North Atlantic is the Atlantic Command's most challenging task. The GAO also reported that, in addition, the Atlantic Fleet Commander stated a carrier battlegroup could deploy to the Caribbean from Mayport, Florida, on the East Coast and be on station to defend the southern sea lanes of communications in approximately the same response time as ships could be deployed from Pensacola, Florida, on the Gulf Coast. Because the Navy did not do a definitive analysis as to how the strategic principle of force dispersal would be achieved, the GAO concluded that the degree to which the Navy will realize this benefit is not clear. (pp. 8-11, p. 21, GAO Draft Report)

DOD RESPONSE: Non Concur. Apparently GAO desires an OPS ANALYSIS type empirical quantification of the Strategic Homeporting Concept. While modeling techniques exist for various wargaming strategies, the Navy determined they would be neither valid nor conclusive to quantify the benefits of the Strategic Homeporting Concept since such analysis is extremely scenario dependent. The Navy's Strategic Homeporting Concept and its 5 principles evolved from almost a decade of continuous operational assessment of the capabilities and threats posed by the Soviets and other potential adversaries by various intelligence organizations, Fleet CINCs, and Chief of Naval Operations strategic planners coupled with extensive analysis and input from logistics and facilities planners to develop a Master Basing Plan for the 600 ship Navy. This plan, which was developed in consonance with the Navy's Maritime Strategy, was formalized in an October 1982 classified document, titled, The Strategic Homeporting Plan. Subsequent refinement of that plan through input from various levels of the Navy has resulted in the Strategic Homeporting Concept.

The benefits of strategic homeporting, while not quantified empirically, are clear to the collective judgment of the top military professionals of the Navy, both past and present. During interviews with GAO, both Fleet Commanders, verbally and in writing, provided a classified assessment of the various threats, enumerated the benefits of strategic homeporting and specifically stated they support the concept. Moreover, during testimony to Congress both the Secretary of the Navy (SECNAV) and Chief of Naval Operations (CNO) unequivocally enumerated the benefits and need for strategic homeporting. They concluded that the Strategic Homeporting Concept is sound and enduring reflecting a prudent approach and response to potentially dangerous military contingencies.

Appendix I
Comments From Assistant Secretary of
Defense (Acquisition and Logistics)

The Navy disagrees with GAO's statement that the conventional threat to U.S. ports is relatively low. Recent Soviet submarine operations in the Eastern Pacific and near the Straits of Juan De Fuca highlight this threat. Also, the Soviet (and surrogates) mining and long range aviation capabilities are significant. The Soviets have, in the last two decades, doubled their number of major combatant ships and increased ten-fold their out-of-area deployments. In the next ten years, the Navy estimates the Soviets will increase the capability and accuracy of their weapons platforms which will double their technological warfighting abilities. Therefore, given the balance of forces at sea today, it would be grossly imprudent not to exploit our nation's strategic geography as well as its technological strengths.

Regarding GAO's comment concerning the potentially increased vulnerability of the planned new bases, the Navy evaluated various potential sites for new homeports utilizing an interdisciplinary team comprised of Fleet operational personnel, logistics experts, and physical security planners. Each site was analyzed and evaluated using various criteria which included physical security/vulnerability. Also, a separate physical security assessment was conducted as part of the planning process for each new base. Military Construction (MILCON) facility projects include the most current physical security standards tailored specifically to provide optimum security at each site. These costs are included in Navy estimates.

Also, in a separate study effort, the Naval Investigative Service Command conducted an assessment of the terrorist threat at the proposed new homeports as compared to existing homeports. The classified assessment, dated January 16, 1986, concluded that the terrorism threat to the proposed new homeports was no greater than to any other existing Navy port facility in CONUS.

The Navy disagrees with GAO's conclusion that the new homeports would be more vulnerable than existing Navy ports since they are "open" and could be exposed to possible mining and sabotage. There are only 11 ports currently "closed" to Soviet Block ships. All others are "open" but on a case by case basis requiring advance notification for access to the port (14 days for Soviet ships and 4 to 7 days for other Communist Block Nations). Long Beach, San Francisco, and Mayport, in which GAO proposes to locate additional battleforces, are all "open" ports. Therefore, the vulnerability aspect of GAO's proposal is no different than Navy's plan.

Regarding the Atlantic Fleet Commander's (CINCLANTFLT) 1983 comment that strategic flexibility would be decreased by homeporting a carrier battlegroup in the Gulf Coast instead of at an east coast port, the CNO, after reviewing CINCLANTFLT's position, determined that from his worldwide perspective strategic flexibility would be enhanced with homeporting in the Gulf. Admiral McDonald (former CINCLANTFLT) acknowledges that since his 1983 appraisal, the world situation has changed. Caribbean and Central America threats to our supply lines across the Gulf demand attention. Admiral McDonald recently said that in this environment he would delay a Carrier Battlegroup (CVBG) for at least 30 days from deploying north to ensure supply lines in the Gulf were not in jeopardy. Furthermore, response time to potential contingency areas is more than just a function of transit times. Consideration also must be given to what battlegroups might be in other homeports, weather conditions that might hamper the availability of certain battle forces, as well as the availability of escorts. Homeporting in the Gulf Coast provides enormous flexibility to U.S. military options and significantly increases the potential for reduced response times in some scenarios.

Appendix I
Comments From Assistant Secretary of
Defense (Acquisition and Logistics)

FINDING C: Strategic Homeporting Plan: Battlegroup Integrity.

According to GAO, the Navy claimed that homeporting ships in battlegroup configurations would greatly enhance warfighting coordination by collocating the same or similar units that would operate together during routine exercises and contingency deployments. Also, the GAO reported the Navy further claimed that the opportunity for training, living and working as a complete battlegroup would contribute significantly to improved readiness and to a better offensive/defensive posture. The GAO found, however, that many existing homeports, such as Norfolk and San Diego, already provide some battlegroup integrity for their ships. On the other hand, GAO found that ships for the planned Gulf Coast carrier battlegroup would be dispersed among three cities, and some of the escort ships for the planned San Francisco battleships surface action group would be homeported at Long Beach and Pearl Harbor. The GAO further concluded that even if new homeports are established, contrary to the Navy claim, most training will continue to take place in existing locations, such as the Southern California and Caribbean areas. In addition, the GAO concluded that because personnel will be rotated regularly, crews will not be able to train and work together as a unit any more than they can now. The GAO also reported that Navy officials stated that differing maintenance requirements and schedules may dictate that some ships be replaced by other ships during deployment. The GAO, therefore, concluded that retaining battlegroup integrity for more than one deployment cycle is difficult, whether under the existing homeport structure or under the expanded homeport structure. Because the Navy did not do a definitive analysis as to how the strategic principle of battlegroup integrity would be achieved, the GAO further concluded that the degree to which the Navy will realize this benefit is not clear.
(pp. 11-13, p. 21, GAO Draft Report)

DOD RESPONSE: Non Concur. The Navy evolved its Strategic Homeporting Concept and its 5 principles from almost a decade of continuous operational assessment of the capabilities and threats posed by the Soviets and other potential adversaries by various intelligence organizations, Fleet CINCs, and Chief of Naval Operations strategic planners coupled with extensive analysis and input from logistics and facilities planners to develop a Master Basing Plan for the 600 ship Navy. This plan, which was developed in consonance with the Navy's Maritime Strategy, was formalized in an October 1982 classified document, titled, The Strategic Homeporting Plan. Subsequent refinement of that plan through input from various levels of the Navy has resulted in the Strategic Homeporting Concept.

While battlegroup integrity does exist in ports such as Norfolk and San Diego, it does not exist in other ports where the Navy has capital ships homeported; e.g., Mayport, Long Beach, and San Francisco. Battlegroups presently formed with ships coming from diverse homeports only train together just prior to deployment. Since the battlegroup isn't formed until then, the ships do not work together routinely, at sea or in homeport. The Strategic Homeporting Concept ship mix adjustments in existing homeports will rectify this. But the Navy has an additional need to disperse more of its capital ships while maintaining battlegroup integrity. Planned homeporting of Carrier Battlegroups (CVBGs) and Battleship Surface Action Groups (BB SAGs) at Everett, New York, and in the Gulf Coast provides this necessary dispersal and enhances battlegroup integrity by collocating appropriate escorts.

Appendix I
Comments From Assistant Secretary of
Defense (Acquisition and Logistics)

Navy disagrees with GAO's comment that "battlegroup integrity will not be realized since ships will not be homeported in battlegroup configuration at the new homeports," citing the Gulf Coast CVBG and San Francisco BB SAG. The Gulf Coast CVBG will be homeported in Pensacola, Mobile, and Pascagoula which are only 30-45 miles apart and are considered to be one homeport region for training and ship repair efforts. The San Francisco BB SAG is an expanded SAG (10 ships) and although some assigned escorts will not be homeported together, the Strategic Homeporting Concept (SHC) principles remain valid. Once designated, the San Francisco BB SAG will train, workup, and deploy together maximizing inter-operability and warfighting coordination.

GAO indicates (P. 13) ... "the Pacific Fleet Commander stated that a carrier or battleship might not deploy with the same escorts twice in succession." GAO implies this will nullify the stated benefits of battlegroup integrity. The Fleet Commander while so stating, also indicated that "PACFLT battlegroups would remain intact as much as possible." He further stated that strategic homeporting significantly enhances the probability of deploying together in succession over the current situation. Navy efforts to achieve long term battlegroup integrity should be viewed as a natural outgrowth of years of experience in working up and deploying battlegroups and a desire to improved overall readiness.

Navy disagrees with GAO's conclusion that the SHC will not provide more diverse training opportunities. Although ships will continue to use the Southern California (SOCAL), Puerto Rico (PR), and Virginia Capes (VACAPES) operating areas, they will conduct significant amounts of training and exercises in their homeport regions. With collocation of battleforce ships under the Strategic Homeporting Concept, the opportunity for joint training and operations will be enhanced significantly over the current arrangement. See response to Finding E for specifics.

Navy also disagrees with GAO's comment that "because personnel will be rotated regularly, crews will not be able to train and work together as a unit any more than they do now." Normal shipboard tour lengths (three to four years) greatly exceed the 18 month deployment cycles. Therefore, on the average, individual sailors will experience two to three cycles onboard and operating routinely in the same battlegroup. Experience with the U.S.S. Midway Battlegroup has shown that consistency of tactics, mutual training familiarity, unit (battlegroup) identity, and esprit de corps have resulted from mutual homeporting and joint operations at sea over the long term. These factors have contributed directly to improved operational readiness.

Navy disagrees with GAO's comment that "battlegroup integrity also will be adversely affected by the differing maintenance cycles of ships within a battlegroup." As with personnel tour lengths, maintenance periods (1 year overhauls) occur at fairly long intervals spanning more than one deployment cycle. The shorter maintenance periods will not significantly affect battlegroup integrity since they generally occur at the same point in the deployment cycle for all ships. Both Fleet Commanders also stated to GAO that there is some flexibility in ship maintenance schedules to accommodate battlegroup integrity.

FINDING D: Strategic Homeporting Plan: Industrial Base Utilization.

According to the GAO, the Navy claimed that homeporting ships at or near locations with existing industrial base capability will permit the Navy to take advantage of capacity during peacetime and to have the necessary surge capability in place if needed during mobilization. The GAO found, however, that while the strategic homeporting plan will benefit shipyards in the vicinity of the new homeports, the plan may not significantly impact overall industrial base capability because a considerable amount of unused ship repair capacity is available in the private sector. The GAO observed that a Navy report indicated that 58 private shipyards already are doing work for the Navy, and some of these shipyards are near the new homeports. The GAO also observed that in recent years, the Navy has been increasing the number of short, labor-intensive maintenance actions that are required to sustain the condition of ships between overhauls and, therefore, concluded that, in accordance with Navy policy (changed in May, 1985), private shipyards in the homeport areas will continue to receive most of the work. The GAO further concluded that, as a result, while shipyards in the area of the new homeports could receive more of the repair work, it would be at the expense of an increase in the work for shipyards around existing homeports. Because the Navy did not do a definitive analysis as to how strategic principle of industrial base utilization would be achieved, the GAO finally concluded that the degree to which the Navy will realize this benefit is not clear. (pp. 14-16, p. 21, GAO Draft Report)

DOD RESPONSE: Partially concur. The Navy's Strategic Homeporting Concept evolved from almost a decade of continuous operational assessment of the capabilities and threats posed by the Soviets and other potential adversaries by various intelligence organizations, Fleet CINCs, and Chief of Naval Operations strategic planners coupled with extensive analysis and input from logistics and facilities planners to develop a Master Basing Plan for the 600 ship Navy. This plan, which was developed in consonance with the Navy's Maritime Strategy, was formalized in an October 1982 classified document, titled, The Strategic Homeporting Plan. Subsequent refinement of that plan through input from various levels of the Navy has resulted in the Strategic Homeporting Concept.

Navy does agree that unused ship repair capacity currently exists, but within the last three years 19 private yards have closed. This trend is likely to continue. And since such industrial activity migrates to locations where active homeports exist, fewer homeports mean that the number of economically viable private repair facilities will also tend to decrease. The Navy believes its dispersal plan will nurture the economic vitality of the U. S. Maritime industrial support base in more locations thereby enhancing its ability to expand rapidly in contingency situations. With the Navy fleet growing by 130 additional ships, ship homeporting in all existing homeports will remain at current levels or increase. Therefore, shipyards near existing homeports will not have less work, and increased workload will be more evenly dispersed geographically. This should also contribute to the cost competitiveness of future Navy ship repair and new construction contracts.

FINDING E: Strategic Homeporting Plan: Geographical Considerations.

According to GAO, the Navy claimed that homeporting in more diverse geographical locations on both coasts would permit the Navy to train and operate in a variety of environments and would reduce the response time to potential conflict areas. The GAO found, however, that most fleet training is conducted in the Southern California and Caribbean areas where the Navy already has test facilities and resources, and that the Navy did not indicate any plans to build additional test ranges in the vicinity of the new homeports. With regard to response time, GAO found that the locations of some of the new homeports would, in fact, reduce the steaming time of ships to potential conflict areas. The GAO also found, however, that (1) the Staten Island battleship group and the Everett carrier group would have to rendezvous with ships from other homeports before proceeding to a major conflict area, and (2) the Gulf Coast carrier and battleship groups' steaming time to Central and South America will not be appreciably less than the steaming time from existing homeports. The GAO further found that the steaming time to the North Atlantic will be greater, which is important, because the Gulf Coast carrier group may be needed in the North Atlantic to ensure Soviet containment, defense of the shipping lanes, and reinforcement of Europe. The GAO concluded that, while the strategic homeporting plan might provide more diverse training opportunities and some reduced response times, the impact will not be significant. Because the Navy did not do a definitive analysis as to how the strategic principle of geographical considerations would be achieved, the GAO further concluded that the degree to which the Navy will realize this benefit is not clear. (pp. 16-19, GAO Draft Report)

DOD RESPONSE: Non concur. The Navy's Strategic Homeporting Concept evolved from almost a decade of continuous operational assessment of the capabilities and threats posed by the Soviets and other potential adversaries by various intelligence organizations, Fleet CINCs, and Chief of Naval Operations strategic planners coupled with extensive analysis and input from logistics and facilities planners to develop a Master Basing Plan for the 600 ship Navy. This plan, which was developed in consonance with the Navy's Maritime Strategy, was formalized in an October 1982 classified document, titled, The Strategic Homeporting Plan. Subsequent refinement of that plan through input from various levels of the Navy has resulted in the Strategic Homeporting Concept.

Navy disagrees with GAO's conclusion that "while strategic homeporting will provide more diverse training opportunities and some reduced response times ... the impact likely will not be significant." Although ships will continue to use the SOCAL, PR, and VACAPES operating areas, they will also conduct significant amounts of training and exercises in their homeport regions in the Northeast and Northwest which contain expansive restricted zones for ASW, ASUW, and AAW training including live ordnance usage. The Commander in Chief, Pacific Fleet (CINCPACFLT), in response to GAO questions, stated ... "When not deployed to the SEVENTHFLT, the Everett CVBG would provide increased naval presence in the NORPAC/Gulf of Alaska region ... Basic training for NIMITZ and Puget Sound homeported escorts, and some NIMITZ airwing workup, will be conducted in the Pacific Northwest. In addition, small scale exercises such as COMPTUEX, TORPEXES on the NANOOSE Range, and participation in MARCOT exercises with the Canadians will routinely be conducted in the Pacific Northwest. The Everett CVBG will also provide mutual training for battlegroup ships and Trident SSBNs homeported in Bangor." Experience with the USS MIDWAY Battlegroup has shown that consistency of tactics, mutual training familiarity, unit (Battlegroup) identity, and

Appendix I
Comments From Assistant Secretary of
Defense (Acquisition and Logistics)

esprit de corps have resulted from mutual homeporting and joint operations at sea over the long term. These factors have contributed directly to improved operational readiness.

With regard to response times, the potential for reduced transit times to possible contingency areas with strategic homeporting is significant due to dispersal to new homeports in the Northeast, Northwest, and Gulf Coast. Beyond the contingency of a major war, are other so-called "lesser contingencies" in which Naval Forces are dispatched by the National Command Authority. In all such cases, rapidity of response with ready battleforces is the critical ingredient of success. In relative terms, several days less transit time plus eliminating the delay associated with waiting to rendezvous with non-located escorts, can be crucial to the outcome of the effort. But response time to potential contingency areas is more than just a function of transit times. Consideration also must be given to what battlegroups might be in other homeports (e.g., the closest available east coast battlegroup to a Caribbean contingency may be in Norfolk at the time if none are homeported on the Gulf Coast), weather conditions that might hamper the timely availability of battleforces located outside of the contingency area, as well as the availability of escorts. Homeporting on the Gulf Coast provides enormous flexibility to our military options and increases the potential for reduced response times to these regions. Even if a contingency arose in the North Atlantic, CINCLANTFLT stated he would retain a CVBG in the Gulf for at least 30 days to ensure supply lines in the Gulf were not in jeopardy.

GAO indicated (p. 18) that the Atlantic and Pacific Fleet Commanders stated that BB SAGs would never be deployed independently [without a CVBG] into a potential major conflict area. Therefore, GAO concludes there would be no reduction in response times to contingency areas because the Staten Island and Everett battleforces would have to wait to rendezvous with ships from other ports.

- This is a misstatement of fact. CINCPACFLT stated in writing to GAO that ... "BB SAGs will usually operate independently ... For brief periods of time, they may supplement or complement a CVBG or CVBF". What the Fleet Commander did say was that ... "A BB SAG would never be deployed independently in a high air threat contingency environment without appropriate air cover, land or sea based." A review of the New Jersey BB SAG deployment schedule since it was recommissioned in 1983 reveals that it has always deployed independently.

- CINCLANTFLT stated in writing to GAO that ... "BB SAGs will operate independently in peace time and may be used in conjunction with CVBGs in wartime. Estimate 85% independent operation/15% CVBG support OPS. Land based air cover will determine independent operations areas." A review of the IOWA BB SAG schedule since it was recommissioned in 1984 reveals that it has participated in 9 major evolutions and operated independently [without a CVBG] in 8 of the 9.

- Admiral Watkins' Feb 86 report before the HASC on the Navy's Posture and FY 1987 Budget stated on page 36 ... "Battleship groups will be employed either independently or integrated with carrier battleforces, dependent upon the level of potential enemy threat, availability of land based air support, and other factors."

In summary, contrary to GAO's statement, Staten Island and Everett battleforces would not have to wait to rendezvous with ships from other ports.

Appendix F
Comments From Assistant Secretary of
Defense (Acquisition and Logistics)

FINDINGS F: Strategic Homeporting Plan: Logistics Suitability.

According to the GAO, the Navy claimed that key logistic considerations such as waterfront capacity and accessibility, maintenance availability, and personnel support capability, were major factors in determining the potential of specific locations as homeports. The GAO observed, however, that while logistics was claimed as a factor in selecting the new homeports, Navy officials stated that they are still trying to determine how to best provide logistical support. According to the GAO, the Atlantic Fleet Commander, for example, is currently determining the ammunition, refueling, and maintenance support to be provided the new homeports on the Gulf Coast. The GAO also reported that the Navy claimed that it wanted to maximize the use of the existing base infrastructure. GAO found, however, that the logistics suitability of existing homeports was not studied during the selection process for the new homeports. Based on its review of the Strategic Homeporting Plan, the GAO concluded that the infrastructure of the existing homeports will be used at a level considerably less than the maximum. Because the Navy did not do a definitive analysis as to how the strategic principle of logistics suitability would be achieved, the GAO further concluded that the degree to which the Navy will realize this benefit is not clear. (pp. 19-20, and p. 21, GAO Draft Report)

DOD RESPONSE: Non Concur. Navy disagrees that logistic suitability of existing homeports was not considered during the selection process or that the infrastructure of the existing homeports will be used at a level considerably less than maximum. Navy logistics and facilities planners utilized various master basing plans and facilities assessment studies conducted over the last decade as well as data from base master plans, regional and systems studies, Base Commander Annual Assessment replies, Annual Inspection Summaries which identify the backlog of essential base maintenance and repair, and Base Facility Requirements documents to assess the logistic suitability and capacity of existing homeports. As discussed in response to FINDINGS K through P, and from data included in the Navy's November 1985 Cost Alternatives Study for establishing homeports, it has been well documented that significant facility and infrastructure deficiencies exist at all existing homeports. For example, as of January 1986, MILCON deficiencies identified at Newport total \$170M, Norfolk \$314M, Charleston \$107M, Mayport \$80M, Long Beach \$129M, San Diego \$546M, and Pearl Harbor \$443M. Thus, excess capacity does not exist in existing naval homeports.

Appendix I
Comments From Assistant Secretary of
Defense (Acquisition and Logistics)

FINDING G: Staten Island Battleship Group's Cost Estimates.

The GAO reported that the total cost of the projects included in the Navy's August 1985 draft master plan for the Staten Island Battleship Group was initially estimated to be \$397 million. The GAO found, however, that in November 1985, the Navy reduced the construction cost estimate to \$188 million. According to the GAO, the Navy claimed that projects making up this amount would achieve an initial operating capability. In comparing the two estimates, the GAO found that the \$209 million difference includes many projects that will be needed either immediately or eventually to accommodate a battlegroup at Staten Island. The excluded projects include housing, welfare and recreation, and miscellaneous building and facility construction. The GAO also reported that, in addition, the Navy excluded a \$12 million project for dredging in the expectation that local governments would fund this effort. The GAO noted, however, that this matter has not been resolved. The GAO further reported that some costs were not included in either the master plan estimate or the initial operating capability estimate. According to GAO, the largest excluded construction cost relates to family housing. If the costs of the other housing units are representative, the total additional cost could be \$120 million (for 1200 units). The GAO also pointed out that, in addition, operation and maintenance, and procurement appropriations will be required to outfit and run the homeport. According to GAO, the Navy estimates that annual operation and maintenance costs will be 16.5 million, and the outfitting will cost \$14 million. The GAO concluded that Navy estimates for the Staten Island Battleship group relate only to construction costs and are, therefore, understated because the costs associated with outfitting and operating the new homeport are not included. (pp. 23-28, GAO Draft Report)

DOD RESPONSE: Non Concur. Before responding specifically to the Staten Island BB SAG and subsequent Cost Estimate FINDINGS, the following general issues need to be addressed to properly discern between Navy and GAO cost estimates.

The GAO Report does not acknowledge information provided in the Navy's November 1985 Military Necessity/Cost Effectiveness Study. The Navy Study provided to Congress is very detailed and identifies all construction costs (Military Construction, Family Housing, and Nonappropriated Fund) required to provide a full operating capability for all ships and personnel to be assigned to the new homeports. Likewise, it provides detailed cost estimates for homeporting these ships in various alternative existing Navy ports.

In comparison, GAO estimates for berthing additional ships in existing homeports only include costs for new piers. No costs are included for required additional channel/turning basin/pierside dredging, pier and shoreside utilities, SIMA/water-front OPS facilities, supply/public works facilities, admin/training/security buildings, community/personnel support, BEQ/BOQ, or family housing. In fact, there are significant facility and infrastructure deficiencies in almost all of these categories at every existing homeport based upon current ship loadings.

GAO also states (p. 6) that "...reserve ships are not considered part of the 600 ship Navy" and therefore did not include any costs to berth reserve ships. Deployable reserve ships are part of the 600 ship Navy. In fact a "reserve ship" is manned with 60% active duty personnel and 40% selected reservists. Navy cost estimates for Staten Island, Everett, West Coast, and Gulf Coast homeports include all facilities necessary to support the collocated reserve ships. GAO alternative cost estimates do not.

Appendix I
Comments From Assistant Secretary of
Defense (Acquisition and Logistics)

GAO states (p. iv) ... "Navy estimates for all of the new homeports total \$799M to establish an Initial Operating Capability ... estimates developed by deleting projects needed to achieve full operating capability at some locations." The Navy Military Necessity/Cost Alternatives Study submitted to Congress identifies \$845.9M construction funding (including family housing and NAF projects) for full operating capability for all assigned ships and personnel at the new homeports. Once constructed each base will be fully operational. There will be, however, as with all other existing military installations, desirable projects for which funding may be requested in the outyears. These projects, identified in the Navy's Cost Study as "enhanced program," are desirable but not essential and will have to compete within the total Navy backlog of projects at other Navy installations.

While the GAO statement that Navy homeporting estimates relate to construction costs and do not include estimates of the costs associated with outfitting and operating the new bases is correct, it is incomplete. The Navy's Cost Alternatives Study only identified construction costs since it was provided to Congress in response to SASC (MILCON Subcommittee) report language. However, the Navy, at GAO's request, also provided estimates of O&MN (Base Operating Support) and OPN funding requirements for Staten Island and Everett.

GAO states (p. 24) that A&E firms use the Navy's "Facility Planning Criteria for Navy and Marine Corps Shore Installations" (NAVFAC P-80) as a basis for requirements." The NAVFAC P-80 states, in its forward, that the "planning criteria are established as a guide and normally will be considered as a maximum for facilities listed." These requirements are a starting point for project definition and continue to be scrutinized as planning proceeds. Original A&E estimates reflect total costs to fully develop master plans without regard to existing military and civilian assets near the new homeports or prudent operational and economic review of alternatives. The Navy has since determined which projects are necessary to adequately accommodate all planned ship assignments.

THE FOLLOWING PROVIDES SPECIFIC RESPONSES TO THE STATEN ISLAND COST ESTIMATE FINDING:

Cost differences cited by GAO are based on preliminary unvalidated requirements, which appeared in early A&E estimates, but no longer are part of the planned programs for Staten Island. Costs developed by an A&E under contract to the Navy do not represent an approved Navy construction program or funding level. Rather, they represent a very preliminary stage in the planning process. For example, the GAO Report (p. 25) lists A&E projects totalling \$397M for Staten Island. This list includes every project ever considered for New York, including many which have been deleted from consideration. These include Pier II, \$32M; Dayton Manor Housing, \$12.1M; SIMA (Phase II), \$10M; Commissary, \$2M (will utilize existing commissary at Fort Hamilton); Officers' Club Phase II, \$.94M (will use existing club at Fort Hamilton); Confinement Facility, \$6.6M (Several detention cells only required and are included with security complex); CBU, \$2M; and Small Craft Basin, \$8M. Also, GAO includes all the projects Navy considers "desirable" but not "essential" which are not programmed.

Appendix I
Comments From Assistant Secretary of
Defense (Acquisition and Logistics)

GAO uses an inconsistent basis for comparing their projects/cost estimates with the Navy's. For instance, the GAO report claims two piers are required by the Navy at Staten Island to avoid double nesting (page 27). Double nesting of certain ship hull types has always been acceptable, and is used in all pier planning. The Navy initially considered a two pier option. However, a longer single pier plus a quaywall was found to be more economical and will provide adequate berthing for all assigned ships. In contrast, the GAO report is based on triple nesting schemes for Mayport and Long Beach. Triple nesting is not acceptable operationally or when planning for homeport berthing. It constrains the movement and maintenance of individual ships, exacerbates pier utility capacity problems, increases harbor ops costs drastically, impinges on inboard ships getting underway, and may not even be possible due to differing hull configurations or pier spacings. It is used only as a temporary solution.

The GAO report does not acknowledge information provided in the Navy's Cost Alternatives Study. For example, The GAO report states (Page 26) "...we believe the Staten Island cost estimate should reflect [the housing] requirement..." The Navy's Cost Alternatives Study does include \$38.4M for 420 units of housing at Staten Island. Programming of additional MILCON family housing construction is dependent upon future experience with the availability of private sector housing in the region. Also, the Cost Alternatives Study identifies all MILCON, Family Housing, and Nonappropriated (NAF) projects essential to achieve full operating capability for all assigned ships and personnel at the new homeport. Projects noted in the "enhanced program" are desirable but not required for full IOC and will have to compete Navy-wide in the normal programming/budgeting cycle. For example: at New York "enhanced" but not "essential" projects include an indoor swimming pool/bath house, liquor package store, and Phase II projects to consolidate (at Stapleton/Fort Wadsworth) administrative, supply, and public works facilities which currently exist at NAVSTA New York (Brooklyn).

GAO statements (p. 23) that ... "The office of the CNO, in Feb 1985, ... estimated the site [Staten Island] would cost \$291M...and in Nov 1985 reduced the cost to \$188M" implies that the Navy arbitrarily reduced its cost estimate. This is not correct. The cost provided to GAO by the Navy in Feb 1985 was stated as "preliminary" only. It included MILCON, Family Housing, and NAF costs for both the "basic" and "enhanced" program levels. Navy cost estimates are continually refined as more detailed engineering is accomplished. As early as May 1985, in a letter to Senator Thurmond, SECNAV indicated that the estimated basic cost for Staten Island was \$188M, not including family housing and Nonappropriated funds.

GAO states that the matter of local contribution for funding has not been resolved. This is incorrect. A Memorandum of Agreement was signed February 27, 1985 between the Navy and the Port Authority of New York and New Jersey confirming their \$15M contribution for dredging and partial cost offset for the pier.

Appendix I
Comments From Assistant Secretary of
Defense (Acquisition and Logistics)

FINDING H: Everett Carrier Group's Cost Estimates.

The GAO reported that the total cost of the projects included in the Navy's December, 1985, draft master plan for the Everett Carrier Group was initially estimated to be \$441 million. The GAO found, however, that in November 1985, the Navy reduced the construction cost estimate to \$272 million. According to GAO, the Navy claims that projects making up this amount would achieve an initial operating capability. In comparing the two estimates, however, the GAO found that the \$169 million difference includes needed projects. The GAO reported that \$44 million was excluded for a central wharf, even though Navy documents indicate the entire carrier group cannot be homeported at Everett without this wharf. The GAO further reported that another major excluded project was \$27 million for off base highway improvements. Again, the GAO found that Navy documents indicate access to the homeport will be severely impeded if these improvements are not accomplished. The GAO also reported that the Navy excluded three projects, totalling \$30 million, for morale, welfare, and recreation facilities that have been built with appropriated military construction funds in the past. The GAO further reported that some costs were not included in either the initial master plan estimate or the initial operating capability estimate. The GAO concluded that (1) other construction funds may be needed to upgrade the city sewerage system and build new schools, (2) dredging costs may be higher to dispose of contaminated soil, and (3) access road costs may be higher—for example, a tunnel option could cost as much as \$52 million. The GAO also pointed out that, in addition, operation and maintenance, and procurement appropriations will be required to outfit and run the homeport. According to the GAO, the Navy estimates that annual operation and maintenance costs will be \$15 million and that outfitting will cost \$14 million. Further, since the Navy does not plan to construct family housing, the GAO concluded that military personnel funds will have to be provided for housing allowances. The GAO generally concluded that Navy estimates for the Everett carrier group relate only to construction costs and are, therefore, understated because the costs associated with outfitting and operating the new homeport are not included. (pp. 28-32, GAO Draft Report)

DOD RESPONSE: Non Concur. The GAO Report cites costs for developing the Everett site comparing the "A&E estimate" and Navy's "IOC estimate" implying Navy cost estimates are not complete. Cost differences cited by GAO are based upon preliminary unvalidated requirements, which appeared in early A&E estimates, but no longer are part of planned programs for Everett. Costs and project listings developed by an A&E under contract to the Navy do not represent an approved Navy construction program or funding level. Rather, they represent a very preliminary stage in the planning process. Projects identified during the master planning effort continue to undergo scrutiny from the standpoint of actual need at the homeport site and the scope of the proposed project itself. The Navy's November 1985 Cost Alternatives Study includes all projects that are required to support the full initial operating capability at Everett. These projects totaling \$272M, have received the scrutiny of the Navy planning, programming and budgeting process, and represent current Navy requirements. Other projects not included in this program are desirable but not essential and have not been programmed by the Navy.

Appendix I
Comments From Assistant Secretary of
Defense (Acquisition and Logistics)

GAO's statement (p. 29) that ... "In Nov 1985, the Navy reduced the construction cost estimate for Everett to \$272M" implies that the Navy arbitrarily reduced its cost estimate. Navy cost estimates have been continually refined as more detailed engineering designs are accomplished. As early as May 1985, in a letter to Senator Thurmond, SECNAV indicated that the estimated basic cost for Everett was \$272M.

Navy disagrees that the entire carrier group (11 ships) cannot be homeported at Everett without the central marginal wharf; however, the central marginal wharf would make the Everett site more operationally efficient and is, therefore, included in the Navy's "enhanced program."

Navy disagrees that medical/dental clinic, firing range, brig and administrative facility improvement projects located at Sand Point (NAVSTA Seattle) should have been included in the Navy's cost estimates. Although the scope of several of these projects has been adjusted slightly because of the battlegroup, the requirements existed before the homeporting initiative and, therefore, not attributable to the CVBG.

Navy also disagrees that the construction cost to expand regional ordnance storage and maintenance facilities at Indian Island should be included in the Everett total. Costs associated with upgrading ordnance facilities at Indian Island are based on current and projected PACFLT ordnance storage and maintenance missions. With the addition of another carrier on the west coast, additional ordnance storage and maintenance facilities are required. Additional facilities would be required whether the CVBG is homeported in Everett, San Francisco, Long Beach, or San Diego. New facilities would be required at the respective ordnance storage and maintenance activities servicing the homeport site. While this is a CVBG related expense, it is not accruable to the Everett homeporting, because it would be a cost regardless of the CVBG homeport site.

Navy further disagrees that the Navy inappropriately has excluded Everett morale, welfare, and recreation facilities projects which have been built at other Navy bases with military construction funds. While some recreation facilities are funded through MILCON, it is Congressional policy that revenue producing MWR facilities be funded with Nonappropriated Funds (NAF). Desirable NAF projects are included in the Navy's "enhanced" program. None are included in GAO's cost estimates at existing ports.

GAO comments concerning potential offbase impact costs at Everett disregard existing federal statutes and programs for impact aid to local communities, and don't consider local/state mitigation efforts which are required before any federal assistance is provided. For instance, the City of Everett has identified \$3M and the Port of Everett \$6M for offbase roadway projects related to homeport development. Also, state funding support for access roads is also being pursued. In addition, the City of Everett and Snohomish County have pledged \$6M for park and recreation improvements, and \$6.7M for capital improvements to library, police, judicial, and public works facilities. Concerning impacts on local school systems, federal impact aid under PL81-815A also must be considered.

Appendix I
Comments From Assistant Secretary of
Defense (Acquisition and Logistics)

Finally, GAO's statement that since the Navy does not plan to construct family housing [Everett], military personnel funds will have to be provided for housing allowances is misleading. The Navy's authorized personnel end strength has not been increased due to strategic homeporting. Therefore, the payment of BAQ/VHA is a budgeted cost wherever personnel reside in private housing. It should be noted, however, that VHA rates are lower for the Everett area than any other West Coast port. Major housing deficiencies exist at all of these existing ports.

Appendix I
Comments From Assistant Secretary of
Defense (Acquisition and Logistics)

FINDING I: West Coast Battleship Group's Cost Estimate.

The GAO reported that, in November 1985, the Navy estimated it would cost \$85 million to establish an initial operating capability for the West Coast battleship group. The GAO found, however, that this estimate is preliminary and is not broken out by project. The GAO, therefore, could not comment on the reasonableness of the estimate. The GAO concluded, however, that as with the other proposed homeports, additional facilities may be required for the ultimate development of the homeports because the preliminary estimate only relates to the initial operating capability. The GAO pointed out that not only will the costs of these facilities have to be determined during the comprehensive planning process, the operation and maintenance, and procurement costs will also have to be determined. The GAO generally concluded that Navy estimates for the West Coast Battleship Group relate only to construction costs and are, therefore, understated because the costs associated with outfitting and operating the new homeports are not included.
(pp. 32-33, GAO Draft Report)

DOD RESPONSE: Partially Concur. The \$85M estimate is preliminary and still being refined. However, it includes all known costs to homeport the BBSAG in existing ports for which considerable historical cost data exists. The Navy's estimate is now broken out by project for both MILCON and Repair/Improvement funding. SECNAV's announced preferred alternative utilizing existing homeports, was the lowest cost alternative for homeporting the West Coast BB SAG.

Although GAO considers the Navy's \$85M cost estimate to be low, GAO concludes elsewhere in their report that 17 additional ships could be homeported in the same existing homeports without further waterfront construction. Further, since Navy's proposed West Coast BB SAG homeporting plan utilizes existing homeports, any increased operation and maintenance or procurement costs would also exist under GAO's proposed homeporting plan.

Appendix I
Comments From Assistant Secretary of
Defense (Acquisition and Logistics)

FINDING J: Gulf Coast Carrier And Battleship Groups' Cost Estimates.

The GAO reported that, in November 1985, the Navy estimated that it would cost \$254 million to establish an initial operating capability for the Gulf Coast carrier and battleship groups. The GAO found, however, that this estimate is preliminary and is not broken out by project. The GAO could not, therefore, comment on the overall reasonableness of the estimate. The GAO did find indications, however, that the \$25 million estimate for Pensacola (one of nine locations for the group) may be understated. According to GAO, a July 1983 Atlantic Fleet study stated that \$46 million would be needed for a new berthing pier, \$35 million for dredging, and \$31 million for an ordnance handling pier—i.e., that overall, \$239 million would be needed to construct an optimum facility and a less capable facility would cost \$194 million. The GAO also pointed out that the November 1985 estimate for all of the Gulf Coast homeports relates only to the initial operating capability and, as with the other proposed homeports, additional facilities may be required for the ultimate development of the homeports. The GAO noted, for example, that the Corpus Christi, Pascagoula, and Mobile homeports, do not have waterfront facilities or piers. The GAO concluded that not only the costs of these facilities will have to be determined during the comprehensive planning process, but that operation and maintenance costs, and procurement requirements and costs will have to be determined. The GAO generally concluded that the Navy estimate for the Gulf Coast carrier and battleship groups relate to construction costs only and are, therefore, understated because the costs associated with outfitting and operating the new homeports are not included.
(pp. 34-39, GAO Draft Report)

DOD RESPONSE: Partially concur. The \$254M cost estimate is preliminary and still being refined, but the cost estimate is broken out by project for each site. Again, it includes all known costs associated with establishing full Initial Operating Capability for all assigned ships and personnel. Although additional "desirable" projects may be programmed in the outyears, none have yet been identified.

GAO's statement that the \$25M estimate for Pensacola may be understated citing a 1983 CINCLANTFLT study indicating it would cost \$194M - \$239M to homeport a CVBG (7 ships) at Pensacola is misleading. The Navy's \$25M cost estimate for homeporting just an attack carrier (training carrier is relocated), while still being refined, is considered satisfactory for all requirements. It does not include Florida's commitment to fund \$12M for dredging. DOD agrees that the estimated costs cited in the 1983 CINCLANTFLT study to homeport a CVBG in Pensacola are reasonable. Pensacola has limited waterfront areas and facilities and is land constrained. Therefore, to homeport a CVBG, to construct an ordnance pier facility, and to retain the existing training carrier in Pensacola, additional land would have to be created. Significant additional dredging, pier construction and shoreside support facilities also would be needed. For these very reasons, it was more cost effective (SECNAV's announced plan) to relocate the training carrier to Corpus Christi, locate the CV's escorts at Mobile and Pascagoula, and homeport only the operational carrier in Pensacola utilizing the existing training carrier berthing wharf. No ordnance pier is required.

Concerning O&M,N costs to operate and outfit all the new Gulf Coast homeports, Navy estimates it would cost approximately \$10 to 15M more annually than if existing homeports were utilized for these ships. When compared to Navy's \$3.7 billion budget for these functions, this relatively small expenditure is considered a prudent economic investment for the Navy of the 1990s.

Appendix I
Comments From Assistant Secretary of
Defense (Acquisition and Logistics)

FINDING K: Ship Berthing Capacity at Existing Homeports.

The GAO reviewed Navy berthing plans to determine how many ships the piers and quay walls (wharfs) could accommodate, if fully occupied, at existing homeports in Norfolk, Charleston, Mayport, San Diego, North Island, Long Beach, and Alameda. The GAO compared the Navy's capacity data with the ship assignment data, and found the 95 additional ships could be accommodated at the existing homeports, as shown in the following table:

Naval Station Homeport	Currently Homeported Or Expected	GAO Analysis Of Capacity	Additional Ships
Norfolk	93	101	8
Charleston	46	63	17
Mayport	29	44	15
San Diego	73	109	36
North Island	2	4	2
Long Beach	33	47	14
Alameda	6	9	3
			95

The GAO concluded that while these battlegroups may result in other construction costs (such as housing) at some existing homeports, as well as increased operation and maintenance expenses, the existing homeports have the necessary waterfront facilities in place to accommodate an additional 95 ships without further waterfront construction.
(pp. 40-53, GAO Draft Report)

DOD RESPONSE: Non Concur. The Navy disagrees that existing ports have the capacity to accommodate 95 additional ships without further waterfront or shore-side construction. The Navy's November 1985 Cost Alternatives Study submitted to Congress details the significant costs associated with homeporting any additional battleforces in existing homeports.

GAO states that "...reserve ships are not part of the 600 ship Navy." This is incorrect. Deployable reserve ships are part of the 600 ship Navy; but the GAO report does not include any costs or pier berths to accommodate these reserve ships. Navy cost estimates provided in the November 1985 Cost Alternatives Study for relocating a BB SAG or CVBG to existing Navy ports, include facilities necessary to support the reserve ships. Also, Navy cost estimates for its Staten Island, Everett, West Coast, and Gulf Coast initiatives include all necessary facilities to support the collocated reserve ships.

It appears that GAO has developed its existing homeport loading capacities without regard to accommodating reserve ships and to such issues as:

- **Varying Hull Sizes:** Because a particular ship type (auxiliary, cruiser, destroyer, etc.) has different classes of ships, ship sizes vary. The hulls of some ships are such that nesting with another ship is not possible. What may be an adequate berth for one ship may not be for another.

Appendix I
Comments From Assistant Secretary of
Defense (Acquisition and Logistics)

- Pier Configuration: The length, width, location of piers, distances between adjacent piers are all factors that must be taken into consideration when developing berthing plans. Based on local experience at each port, port services personnel have developed various ship berthing scenarios that best suit local conditions. This data was used in developing the Navy's ship berthing plans.

- Cold Iron Utilities: Different piers have different cold iron utilities available. Local port services personnel must match up pierside availability of utilities with the utility needs of homeported ships.

- Maintenance Considerations: The Navy's decision to extend periods between overhauls results in an increase of SRA/PMA activity in homeports. This requires piers to have adequate laydown area, utilities, and adjacent shop space to support that maintenance. It also requires that ships undergoing maintenance be single berthed to provide workers access to both sides of the ship. Based on a recent CINCPACFLT analysis, 12 repair berths are required at San Diego, 3 at Long Beach, and 1 at San Francisco.

- Yard Craft/Visiting Ships: Berthing plans must also take into consideration the berthing space required for yard craft and miscellaneous afloat equipment, as well as visiting tenders, logistic support ships, etc. Also, the GAO Report is based on triple nesting schemes for Mayport and Long Beach (p. 58 & 66). Triple nesting is not acceptable operationally or when planning for homeport berthing. It constrains the movement and maintenance of individual ships, exacerbates pier utility capacity problems, increases harbor ops costs drastically, impinges on inboard ships getting underway, and may not even be possible due to differing hull configurations or pier spacings. It is used only as a temporary solution.

These factors make it difficult to take a strictly mathematical approach to berthing capacities as the GAO apparently has done. The Navy does not concur with the number of berths available shown in the GAO Report. The Navy applies a 67% inport factor for non-dedicated berths by hull type not ship type as done by GAO. The number of berths available should be based on the projected ship mix and loadings at each site and the application of the other berthing factors already enumerated (inport percentages, existing pier configuration, pier utilities, etc). Using this technique, and based on existing assets, the number of "available berths" at each site is as follows:

	BERTHS AVAILABLE	
	NAVY	GAO
NAVSTA Norfolk	68	70
NAVSTA Charleston	36	46
NAVSTA Mayport	22	32
NAVSTA San Diego	50	75
NAS North Island	4	4
NAVSTA Long Beach	30	34
NAS Alameda	7	7
Total	217	268

Therefore, based upon Navy's determination of berths available, application of ship berthing factors enumerated above, and projected increased ship loadings by 1993, no capacity exists within existing homeports to berth additional ships without additional construction. Following is a port by port review of capacities.

Appendix I
Comments From Assistant Secretary of
Defense (Acquisition and Logistics)

GAO table 4.2 (p. 43) estimates the Norfolk ship loading capacity at 70 berths. GAO's 70 berths include two auxiliary berths used by MSC ships and transient ships at the Supply Center. These are dedicated berths provided to support the Supply Center. The Navy's berthing plan, based on actually sitting ships at the piers, shows a maximum ship loading capacity of 93 ships vice 101. The battleship, carriers, and larger amphibious ships share the four berths on piers 11 and 12.

- The Navy Cost Alternatives Study's Long Range Berthing Plan which includes Norfolk shows that ship berthing is at capacity now without an additional BB SAC or CVBG. In fact, Norfolk requires a new pier to accommodate the projected FY93 loadings. With recent decisions on shorter and fewer deployments, and extended periods between overhauls with more SRA/FMA activity, berthing space becomes even more critical. Therefore, if one or more additional ships are assigned to Norfolk, there will be an additional shortage of ship berthing as well as shoreside utilities and support facilities.

GAO table 4.3 (p. 44) estimates that 46 berths are available at Charleston. However, the report did not include a berthing plan for Charleston. Navy's analysis of Charleston, using the berthing plan developed in the Cost Alternatives Study, shows there is a capacity to berth 36 ships vice 46. A berthing plan has been provided by the Navy. It appears that the GAO plan is predicated on triple-nesting and a lack of knowledge regarding local berthing considerations for specific ship types. Triple-nesting reduces ship width between piers which could make such nesting physically impossible or pose untenable constraints on operations.

GAO table 4.4 (p. 46) estimates that 32 berths are available at Mayport. However, GAO's berthing plan on page 58 shows Mayport harbor berths completely filled with only 27 ships and one triple nested. Four of the ships are shown berthed at a new wharf not yet programmed or funded. The Navy's analysis concluded that Mayport was operationally unsuitable for the relocation of the Staten Island BB SAC due to the harbor's lack of berthing capacity beyond that required for increases already planned. Likewise, the Gulf Coast CVBG could not be accommodated in Mayport (as suggested by GAO) for the same reason.

GAO states (p. 47) ... "Our analysis showed that the Naval Station [San Diego] has the capacity to support 109 ships. Therefore, we estimate that this port could accommodate 36 additional ships." The Navy's analysis included in the November 1985 Cost Alternatives Study shows a maximum capacity to berth 50 ships. Of the 72 ships included in the homeporting forecast for NAVSTA San Diego, an average of 54 would be inport. This number was derived by taking the projected ship assignments for NAVSTA and applying the berthing rules (stated previously) to determine the number and class of ships requiring berths. A berthing plan was then developed showing each ship at a berth based on local conditions such as availability of appropriate cold iron utilities, depth of water alongside pier, pier/wharf configuration, maintenance considerations, etc. For instance, Piers 10, 11, 12 and 13 are only marginally satisfactory for LST or smaller ships. They are only 30 feet wide with minimal utilities (a 90 foot pier width is minimal). Also, the depth alongside is suitable only for shallow draft ships.

Appendix I
Comments From Assistant Secretary of
Defense (Acquisition and Logistics)

- Based on Navy's analysis a new pier is required to support the current projected ship loadings. Therefore, no excess capacity exists. If, in addition, a CVBG was assigned, another new pier would be required at NAVSTA for the escorts and a new marginal wharf required at North Island for the carrier. Also, additional shoreside utilities and support facilities would be required. GAO cost estimates include none.

GAO table 4.7 (p. 51) indicates Long Beach could accommodate 14 additional ships. On the GAO berthing plan, 8 ships are shown on Pier 15. This includes triple nesting and berthing for 3 ships at a pier extension that does not currently exist. The Navy's berthing plan included in the November 1985 Cost Alternatives Study provides for 30 ships (vice 34 per GAO) based on projected ship loadings and the berthing factors (hullsize, maintenance considerations, etc.) previously discussed. Also, GAO suggests that both Pacific Fleet battleships be homeported in Long Beach which is operationally unacceptable and berthing cannot be accommodated.

- GAO states (p. 50) "...The Long Beach complex contains over 1600 acres of land." However, this land area includes the Naval Station, Naval Supply Center, Shipyard, and Hospital. The Naval Station itself contains only 1177 acres of which 639 are uplands and 538 are submerged. Any significant expansion of shipberthing and shore support facilities would require acquisition of additional real estate.

Appendix I
Comments From Assistant Secretary of
Defense (Acquisition and Logistics)

FINDING L: Homeporting Staten Island and Gulf Coast Battleship Groups at Norfolk.
The GAO reported that the Staten Island battleship group consists of the IOWA and four escort ships and the Gulf Coast (Corpus Christi) battleship group consists of the WISCONSIN and two escort ships. The GAO observed that the eight ships in these groups equal the additional ship capacity available at Norfolk with existing facilities. The GAO further observed that Norfolk's master plan indicates that a new pier, capable of berthing six more ships, will be constructed in fiscal year 1989 at an estimated cost of \$3 million. As shown below, the GAO found a sizeable cost difference between putting the two battleship groups at Norfolk, as opposed to establishing new homeports for them at Staten Island and Corpus Christi.

<u>New Homeports</u>	<u>Type of Estimate</u>	<u>Cost (millions)</u>
Staten Island	Architect and engineering or initial operating capability	\$ 397 or \$ 188
Corpus Christi	Initial Operating Capability	\$ 85
<u>Existing Norfolk Homeport:</u>	Construction pier 1	\$ 35

While recognizing that any decision to establish new homeports should not be based solely on cost (i.e., the Navy's strategic rationale should be taken into account), the GAO nevertheless concluded that it is considerably less costly to accommodate the identified battleship groups at Norfolk, than to establish new homeports. (The GAO noted that an exact quantification of the cost difference is not yet possible because the Navy has not developed complete total or comparative cost data.)
(pp. 55-56, GAO Draft Report)

DOD RESPONSE: Non Concur. Navy disagrees that the Staten Island and Gulf Coast BB SAGs (8 ships) could be accommodated at Norfolk after an already planned pier (FY 89) is constructed. Ships associated with the Staten Island and Gulf Coast BB SAGs include 16 not 8 ships. GAO did not include reserve ships and should have. Not included in either of these totals is the training carrier. The "planned pier" that GAO cites, is not programmed or funded. Regardless, this new pier is required to satisfy existing berthing deficiencies in Norfolk and, therefore, not available to berth the relocated BB SAGs as suggested by GAO. For example, the Base Commander's latest Annual Facilities Assessment states "...existing piers cannot provide the support required both in terms of lineal footage or utilities... projected completion of Pier 10 in FY87 will not resolve the shortage of berthing. During periods of heavy loading, utility systems cannot provide the required hotel services. Heavy port loading precludes pier availability for repairs." See response to FINDING K for more specifics on Norfolk port capacity limitations.

The Navy estimate, included in its Cost Alternatives Study, was \$116.5M to accommodate the relocation of the Staten Island BB SAG to Norfolk. See page 9 of the Cost Study. The GAO estimate does not include required shore-side support facilities such as supply, public works, personnel, administration, utilities, family housing or MWR facilities. Supporting DOD's position is the Base Commander's Annual Report which states ... "There is a shortfall of 1,037 spaces for E-1 to E-9s.... Eleven of 16 BEQ's predate 1942 ... Facilities

Appendix I
Comments From Assistant Secretary of
Defense (Acquisition and Logistics)

for physical fitness are overcrowded and restrict programs ... existing police station is not adequate to meet current and projected needs ... The Navy Supply Center has identified a deficiency of over one million SF of storage space."

The Current family housing deficiency in Norfolk totals 4145 units and is expected to increase to 4761 units by 1990 without an additional 3B SAG. GAO did not include any housing construction costs in its estimates. Also, GAO did not include alternate site costs for the two reserve Frigates remaining in the New York area.

Appendix I
Comments From Assistant Secretary of
Defense (Acquisition and Logistics)

FINDING M: Homeporting Gulf Coast Carrier Group at Mayport.

The GAO reported that the Gulf Coast carrier group consists of an unnamed carrier to be homeported at Pensacola, four escort ships to be homeported at Mobile, and four escort ships to be homeported at Pascagoula. The GAO observed that the nine ships in this group is considerably less than the additional capacity of 15 ships at Mayport. The GAO further observed that Mayport's master plan indicates that a new berthing wharf, capable of berthing four more ships, will be constructed in fiscal year 1988 at a cost of \$17 million. As shown below, the GAO found a sizeable cost difference between putting the Gulf Coast carrier group at Mayport, as opposed to establishing new homeports for it at Pensacola, Mobile, and Pascagoula.

<u>New Homeports</u>	<u>Type of Estimate</u>	<u>Amount (millions)</u>
Pensacola	Initial operating capability	\$ 25
Mobile	Initial operating capability	\$ 33
Pascagoula	Initial operating capability	\$ 57

Existing Mayport

<u>Homeport:</u>	Construct berthing wharf	\$ 17
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While recognizing that any decision to establish new homeports should not be based solely on cost (i.e., the Navy's strategic rationale should be taken into account), the GAO nevertheless concluded that it is considerably less costly to accommodate the Gulf Coast carrier group at Mayport, than to establish new homeports. (The GAO noted that an exact quantification of the cost difference is not yet possible because the Navy has not developed complete total or comparative cost data.)

(pp. 57-59, GAO Draft Report)

DOD RESPONSE: Non Concur. Navy disagrees that the Gulf Coast Carrier Group (9 ships) could be accommodated in Mayport after a planned wharf is built. Ships associated with the Gulf Coast CVBG include 11 not 9 ships. GAO did not include reserve ships and should have. Not included in either of these totals is the training carrier. Also, GAO's "planned" wharf is not programmed or funded. Regardless, it is required to support the projected increases at Mayport in the mid FY 90 timeframe without an additional CVBG. Another wharf would have to be built in the congested Mayport harbor for the CVBG which would be operationally unacceptable.

- GAO's plan requires triple nesting and would not permit berthing needed for auxiliary and yard craft, visiting tenders, supply replenishment ships, etc. See response to FINDING K for more specifics on Mayport port capacity limitations.

During the Navy's detailed Cost Alternatives Study it evaluated Mayport and determined that an additional BB SAG or CVBG would not fit without triple berthing; therefore, the site was considered operationally unsuitable (See pages 9 and 33 of the Cost Study).

- GAO's proposal does not include costs for required dredging, public works/supply/maintenance facilities, housing and other support facilities, or alternate site costs for the two reserve Frigates. For example, the Base Commander's latest Annual Facilities Assessment states ... "The Mayport basin has a severe silting problem necessitating maintenance dredging every 3 years (\$4.5M) and

Appendix I
Comments From Assistant Secretary of
Defense (Acquisition and Logistics)

periodic interim emergency dredging ... Of the 15 pierside berths, only four are approved ammo handling berths. Considering the amount of ship moves, SRAs and ordnance moves, munitions handling berths are extremely limited ... Existing medical/dental facilities cannot accommodate the current population of 17,000 active duty, 17,600 dependents and 14,700 retired personnel. These numbers are expected to rise by FY90 to 19,300 active duty and 20,100 dependents ... No land for expansion ... piers considered inadequate for present ship loading ... Sewer and water treatment facilities are inadequate for projected ship loadings."

The current family housing deficiency in Mayport totals 1090 units and is expected to increase to 3981 units by FY90 without an additional CVBG. GAO did not include any housing construction costs in its estimate.

Appendix I
Comments From Assistant Secretary of
Defense (Acquisition and Logistics)

FINDING N: Homeporting Everett Carrier Group at San Diego.

The GAO reported that the Everett carrier group consists of the NIMITZ and eight escort ships. The GAO observed that the nine ships in this group are considerably less than the combined additional capacity of 36 ships at the San Diego Naval Station and the two ships at the North Island Naval Air Station. The GAO further observed that the carrier and the cruiser LONG BEACH, which cannot pass under the Coronado bridge to the naval station, could be homeported at North Island and the remaining seven escort ships could be homeported at the San Diego Naval Station with existing berthing piers. The GAO reported, however, that the Navy believes an additional dedicated carrier berthing wharf, costing \$34 million, would be required at North Island for periods when none of the carriers are away for major overhaul under the Service Life Extension Program. As shown below, the GAO found a sizeable cost difference between putting the Everett carrier group at a combination of the San Diego Naval Station and the North Island Naval Air Station, as opposed to establishing a new homeport at Everett.

	Type of Estimate	Amounts (millions)
<u>New Everett</u>	Architect and engineering	\$ 441
<u>Homeport:</u>	or initial operating	or
	capability	\$ 272
<u>Existing Homeports:</u>		
San Diego Naval	None	0
Station	Construct berthing	
North Island	wharf	\$ 34

While recognizing that any decision to establish a new homeport should not be based solely on cost (i.e., the Navy's strategic rationale should be taken into account), the GAO nevertheless concluded that it is considerably less costly to accommodate the Everett carrier group at San Diego and North Island than to establish a new homeport. (The GAO noted that an exact quantification of the cost difference is not yet possible because the Navy has not developed complete total or comparative cost data.) (pp. 59-62, GAO Draft Report)

DOD RESPONSE: Non Concur. The Navy's detailed November 1985 Cost Alternatives Study estimates it would cost \$173.1M to homeport the Everett CVBG in San Diego (See page 10 of the Cost Study). GAO shows escort ships berthed at Piers 10, 11, and 12. These piers, along with Pier 13, are only marginally satisfactory for LST or smaller ships. They are 30 feet wide with minimal utilities. The depth alongside is suitable only for shallow draft ships. Because of these shortcomings, the Navy has not included them as long-term berthing assets.

- To accommodate the relocation of the Everett CVBG in San Diego, a new pier would be required at NAVSTA San Diego for seven escorts and a new marginal wharf would be required at North Island for the CVN (plus upgrade of Pier J-K for the CGN).

Appendix I
Comments From Assistant Secretary of
Defense (Acquisition and Logistics)

GAO states (p. 48) ... "The number of carriers [at North Island] is expected to decrease to 2. Under current [SLEP] plans the program will keep at least one carrier away from North Island between April 1985 and Nov 1993." This is incorrect. Since the INDEPENDENCE will replace KITTY HAWK during her SLEP, the period during which there will only be two CVs homeported in San Diego is Oct 90 - Nov 93. At all other times 3 will be homeported. Additionally, one more CVN, due to enter PACFLT in FY 91, has not yet been assigned a homeport.

GAO's cost estimate does not include required additional facilities for SIMA, supply/public works, administration, personnel support, BEQ/BOQ, utilities, family housing, or costs for homeporting the two reserve Frigates and two reserve mine warfare vessels.

- A CINCPACFLT (CPF) May 1985 Base Capacity Study indicates ... "Land short at all activities ... High rise construction generally required ... No land available for outdoor recreation facilities ... Estimate \$275M to bring all piers/wharfs to meet minimum criteria".

- The Base Commander's latest Annual Facilities Assessment states ... "Major structural and shore power deficiencies exist at piers 10, 11, 12, and 13, reducing capability to handle current berthing demands. Piers are only 30' wide and crane loads are limited by structural integrity. Pier 13 not operational ... There is currently a 4000 bed BEQ/BOQ shortage ... Galley seating capacity is 516 and must be able to accommodate an additional 1000 personnel by FY87 due to student training needs ... Security lighting at piers and quay walls is inadequate." See response to FINDING K for more specifics on San Diego port capacity limitations.

The current family housing deficiency in San Diego totals 6165 units and is projected to increase to 6276 units by FY90 without an additional CVBG or BB SAG. GAO did not include any housing construction costs in its estimate.

The position concerning the validity of A&E early planning estimates is provided in prior responses to GAO FINDINGS. Navy's \$272M cost estimate includes all facilities necessary to achieve full initial operating capability for all ships and personnel to be assigned to Everett.

Appendix I
Comments From Assistant Secretary of
Defense (Acquisition and Logistics)

FINDING O: Homeporting Everett Carrier Group at San Francisco.

The GAO reported that homeporting the Everett carrier group in the San Francisco area would require putting the carrier at Alameda and the escort ships at Hunter's Point, which is being reactivated for six reserve ships. The GAO also reported that this alternative would require (1) upgrading pier 2 at Alameda, (2) upgrading the north and south piers at Hunter Point, and (3) moving a destroyer tender and a cruiser from Alameda to Hunters Point. According to GAO, the Naval Facilities Engineering Command estimates that upgrading the three piers would cost \$89 million. Accordingly, as shown below, the GAO observed a sizeable cost difference between putting the carrier group in the San Francisco area, as opposed to establishing a new homeport at Everett.

	Type of Estimate	Amounts (millions)
<u>New Everett Homeport:</u>	Architect and	\$ 441
	engineering or	or
	Initial operating	\$ 272
	capability	
<u>Existing San Francisco</u>		
<u>Homeport: Alameda and</u>		
<u>Hunters Point</u>		
	Upgrade 3 piers	\$ 89

While recognizing that any decisions to establish a new homeport should not be based solely on cost (i.e., the Navy's strategic rationale should be taken into account), the GAO nevertheless concluded that it is considerably less costly to accommodate the Everett carrier group at San Francisco (Alameda and Hunters Point), than to establish a new homeport. (The GAO noted that an exact quantification of the cost difference is not yet possible because the Navy has not developed complete total or comparative cost data.) (pp. 62-65, GAO Draft Report)

DOD RESPONSE: Non Concur. The Navy's detailed November 1985 Cost Alternatives Study for establishing homeports evaluated San Francisco to accommodate a relocated Everett CVBG. This plan requires a new pier at NAS Alameda to berth the CVN and four escorts, and a new pier at NAVSTA Treasure Island to berth the remaining CVBG escorts. The Navy's estimate to accommodate the Everett CVBG in San Francisco is \$252.6M. This includes required waterfront facilities and shoreside support facilities (See page 10 of the Cost Study). The GAO Report did not include any shoreside support costs.

Hunters Point was not included as an alternative in the Navy's study because Hunters Point is to be used for homeporting six reserve ships displaced from Treasure Island and Drydock #4 has been reactivated for ship maintenance needs in the Bay Area. GAO's berthing plan would preclude this use as well as ship repair activities currently being performed by Triple A at Hunters Point on land and facilities out-leased from the Navy.

The position concerning the validity of A-E early planning estimates is provided in prior responses. Navy's \$272M cost estimate includes all facilities necessary to achieve full initial operating capability for all ships and personnel to be assigned to Everett.

Appendix I
Comments From Assistant Secretary of
Defense (Acquisition and Logistics)

FINDING P: Homeporting West Coast Battleship Group at Long Beach.

The GAO reported that the West Coast battlegroup consists of the MISSOURI and one escort ship to be homeported at San Francisco (Treasure Island), four escort ships to be homeported at Pearl Harbor, and four escort ships to be homeported at Long Beach. The GAO observed that the six ships at Treasure Island and Pearl Harbor are considerably less than the additional capacity of 14 ships available at Long Beach with existing facilities. The GAO also observed that the costs of establishing an initial operating capability at the three new homeports are as follows:

<u>Homeport</u>	<u>Type of Estimate</u>	<u>Amount</u> <u>(Millions)</u>
San Francisco (Treasure Island and Hunters Point)	Initial operating capability	\$ 67
Pearl Harbor	Initial operating capability	\$ 6
Long Beach	Initial operating capability	\$ 12

While recognizing that any decision to establish new homeports should not be based solely on cost differences (i.e., the Navy's strategic rationale also should be taken into account), the GAO nevertheless concluded that it is considerably less costly to accommodate the West Coast battleship group in existing homeports than to establish new homeports for them. (The GAO noted that an exact quantification of the cost difference is not yet possible because the Navy has not developed complete total or comparative cost data.) (pp. 65-67, GAO Draft Report)

DOD RESPONSE: Non Concur. DOD disagrees that the West Coast battleship group could be accommodated at Long Beach without any additional investment. Navy's analysis concluded that assignment of any additional ships beyond the projected increased loading would require construction of additional waterfront facilities. The Navy estimate to homeport the West Coast BB SAG at Long Beach is roughly equivalent to the alternate cost of homeporting the Everett CVBG at Long Beach - \$187.8M which includes a new pier, pier 15 extension, and additional shoreside support facilities. Moreover, homeporting both PACFLT Battleship Surface Action Groups in the same port (one already in Long Beach) is operationally unacceptable and contrary to the Navy's dispersal plan.

GAO does not include any costs required for additional piers, additional dredging, SIMA, supply/public works, administration, personnel support, BEQ/BOQ, utilities, roads, family housing, or costs for the two reserve Frigates and two reserve mine warfare vessels. Furthermore, the GAO estimate is based on triple nesting (which is operationally unsatisfactory) and berthing 3 ships at a pier extension which doesn't exist. See response to FINDING K for more specifics.

- A May 1985 CPF Base Capacity Study states ... "Land shortage exists requiring acquisition ... No land available for outdoor recreation ... Estimate \$68M to bring all piers/wharfs to meet minimum criteria."

Appendix I
Comments From Assistant Secretary of
Defense (Acquisition and Logistics)

- The Base Commander's latest Annual Facilities Assessment states
"inadequate Fleet landing and small boat berth/fuel pier ... Pier 10 provides
inadequate permanent berthing ... Pier 11 not considered safe in high winds ...
New Port Services Building required ... Planned increase in ship homeporting
requires construction of an additional pier ... 1327 bed BEQ deficiency to meet
existing requirements ... Parking deficit of 750 spaces ... Centrex system
inadequate."

The current family housing deficit in Long Beach is 573 units and is projected
to increase to 1754 units by FY90 without an additional BB SAG. GAO did not
include any housing construction costs in its estimate.

MATTER FOR CONGRESSIONAL CONSIDERATION

ITEM: Because the information presented on strategy, available costs, and
capacity indicates a need for the Navy to better demonstrate the strategic
benefits of new homeports, and to prepare more definitive and complete cost
estimates as a basis for proceeding further, the GAO suggested that the Congress
should require such a demonstration before approving funds for the new homeports.
(p. 67, GAO Draft Report)

DOD RESPONSE: Non Concur. The Navy evolved its Strategic Homeporting Concept
and its 5 principles from almost a decade of continuous operational assessment
of the capabilities and threats posed by the Soviets and other potential
adversaries by various intelligence organizations, Fleet CINCs, and Chief of
Naval Operations strategic planners coupled with extensive analysis and input
from logistics and facilities planners to develop a Master Basing Plan for the
600 ship Navy. This plan, which was developed in consonance with the Navy's
Maritime Strategy, was formalized in an October 1982 classified document,
titled, The Strategic Homeporting Plan. Subsequent refinement of that plan
through input from various levels of the Navy has resulted in the Strategic
Homeporting Concept. Also, the Navy, in response to SASC Report 99-41 (page 252)
provided Congress on November 8, 1985 a detailed Military Necessity/Cost
Effectiveness Study of its Strategic Homeporting Concept. A copy of the study
was furnished to GAO on November 15, 1985.

The Navy has provided a wealth of information to GAO and to Congress concerning
the rationale and benefits of its Strategic Homeporting Concept; has documented
the estimated construction costs required to establish each of the new bases;
and, likewise has identified notional costs associated with locating the Staten
Island, Gulf Coast, and Everett battleforces in existing homeports vice
new. The Navy estimate of the total "Delta" construction cost increase for
establishing new homeports vice homeporting in existing ports ranges from \$55
to \$2174, depending on which alternative ports are used for comparison. Therefore,
the Navy concludes that its Strategic Homeporting Concept is affordable as part
of bringing the 600 ship Navy on line. The concept reflects the Navy's goals
for the 1990s and is firmly supported by top Navy military professionals, both
past and present. Any significant delay beyond the imposed 90 day hold on the
obligation of FY 86 funds authorized by Congress could impact the IOC dates for
Staten Island and Everett.

AO Comment

This report has been revised to reflect the Navy's comments. Many of the comments provided by the Navy are no longer applicable because the report has been revised to acknowledge information in the November 1985 military necessity/cost effectiveness study, the April 1986 study of annual operations and maintenance/other procurement costs, and information in recent congressional hearings in February and April 1986.

Comparisons of Navy Architect and Engineering Firms' Estimates, Navy IOC Estimates, and Navy Enhanced Program Estimates for Staten Island and Everett

Table II.1: Comparison for Staten Island

Dollars in millions

	Project	A&E estimate	IOC estimate	Enhanced estimate
P 085	Land acquisition	\$ •	\$ 4.00	\$ 4.00
P 047	Site improvements (Phase I)	3.92	3.92	3.92
P 048	Pier #1	43.00	39.70	39.70
P 049	Dredging	11.70	•	•
P 050	Bachelor quarters (Phase I)	8.20	8.20	8.20
P 052	Utilities (Phase I)	14.60	14.57	14.57
P 057	Enlisted dining facility	1.90	1.90	1.90
P 065	Land acquisition	2.94	2.94	2.94
P 054	Community services center	12.40	12.40	12.40
P 056	Naval exchange facility	6.20	•	•
P 059	Supply warehouse (Phase I)	5.55	5.55	5.55
P 060	Shore intermediate maintenance activity/operations (Phase I)	27.00	27.00	27.00
P 061	Physical fitness center (Phase I)	3.31	3.38	3.38
P 063	Officer/chief petty officer/enlisted man clubs (Phase I)	5.35	•	•
P 069	Site improvements/utilities (Phase II)	35.09	31.09	31.09
P 074	Navy lodge	2.50	•	•
P 082	Location exchange	1.80	•	•
	Rehabilitate Dayton Manor family housing	12.10	•	•
P 053	Public works facilities (Phase I)	6.00	6.00	6.00
P 064	Bowling alley	3.06	•	•
P 067	Commissary	2.00	•	•
P 068	Post/bank/credit union	1.80	•	•
P 070	Bachelor/enlisted quarters (Phase II)	5.50	5.50	5.50
P 071	Site improvements/utilities (Phase III)	21.80	13.72	13.72
P 072	Outdoor recreation facilities	4.30	•	4.30
P 078	Supply warehouse (Phase III)	4.18	•	4.18
P 081	Physical fitness center (Phase III)	3.62	•	3.62
P 083	Officer/chief petty officer/enlisted man clubs (Phase II)	.94	•	•
P 084	Package store	.83	•	•
	Family housing (320 units)	30.00	•	•
P 051	Headquarters building	7.20	•	7.20
P 055	Confinement facility	6.60	•	6.60
P 075	Construction battalion unit	2.00	•	2.00
P 077	Shore intermediate maintenance activity/operations (Phase II)	10.00	•	10.00
P 079	Public works facilities (Phase II)	5.20	•	5.20

Appendix II
Comparisons of Navy Architect and
Engineering Firms' Estimates, Navy IOC
Estimates, and Navy Enhanced Program
Estimates for Staten Island and Everett

	Project	A&E estimate	IOC estimate	Enhanced estimate
P-058	Pier #2	32.00	*	*
P-086	Utilities (Phase IV)	*	8.13	8.13
P-086A	Final site utilities	*	*	.70
P-066	Small craft basin	8.00	*	*
P-076	Fire fighter trainer	10.50	*	*
P-080	Hobby shops	2.54	*	*
-	Family housing (300 units)	31.00	*	*
-	Exchange, clubs (Phase I)	*	*	8.50
-	Miscellaneous morale, welfare, and recreation projects	*	*	5.30
-	Family housing (420 units)	*	*	38.40
-	Family housing (200 units)	*	*	21.00
	Total	\$396.63	\$188.00	\$305.00

Appendix II
Comparisons of Navy Architect and
Engineering Firms' Estimates, Navy IOC
Estimates, and Navy Enhanced Program
Estimates for State Island and Everett

Table II.2 Comparison for Everett

Dollars in millions

	Project	A&E estimate	IOC estimate	Enhance estimate
P-900	Land acquisition (Phase I)	\$ •	\$17.64	\$ 17.64
P-111	Outer harbor dredging	14.00	13.70	13.70
P-113	Shoreline dredging/site improvements	15.20	14.80	14.80
P-115	Shoreline utilities/site improvements	22.50	18.00	18.00
P-991	Carrier pier	40.00	39.00	39.00
P-901	Land acquisition (Phase II)	•	7.80	7.80
P-902	Land acquisition (Phase III)	•	10.00	10.00
P-903	Land acquisition (Phase IV)	•	26.00	26.00
P-045	Shore intermediate maintenance activity facility	13.70	13.70	13.70
P-055	Barge facility	2.50	•	2.50
P-103	Administration facility	6.20	6.40	6.40
P-104	Industrial complex, logistics	11.10	5.00	11.00
P-108	Medical/dental clinic	9.80	•	11.00
P-112	Dredging inner harbor	8.80	8.80	8.80
P-116	Utilities, second increment	15.50	15.50	15.50
P-117	Security facility	1.95	1.00	1.00
P-121	South marginal wharf	20.00	18.50	18.50
P-123	Central marginal wharf	44.00	•	39.80
P-126	Transit shed/covered storage	8.30	6.08	6.08
P-127	Port services/public works	2.30	1.30	1.30
P-128	Circulation/site improvements	8.30	3.90	3.90
P-143	Access road to site	27.30	•	•
P-145	Naval telecom center	1.40	•	1.70
P-905	Dredging outer harbor	9.90	9.90	9.90
P-990	Bachelor enlisted quarters/dining	18.30	19.80	19.80
P-119	Public works facility	2.00	1.19	1.19
P-141	Road	•	4.10	4.10
P-105	Direct fueling carrier group	5.50	4.88	6.80
P-107	Morale, welfare and recreation facilities (exchange with clubs)	10.80	•	15.70
P-109	Training sub-complex	2.50	•	2.70
P-110	Ground support equipment shop and shed	4.05	4.00	4.00
P-118	Field house	12.00	•	9.40
P-125	Fleet support facility	2.25	1.00	1.00
P-129	Public works facility (Sand Point)	2.05	•	•
P-130	Circulation/site improvements, second increment	1.40	•	•

Appendix II
 Comparisons of Navy Architect and
 Engineering Firms' Estimates, Navy IOC
 Estimates, and Navy Enhanced Program
 Estimates for Staten Island and Everett

	Project	A&E estimate	IOC estimate	Enhanced estimate
P-131	Administrative facility	1.35	*	*
P-144	Radar collimation tower	50	*	50
P-133	Morale welfare and recreation facility (auto hobby shop)	5.30	*	3.20
P-124	Desron wharf final increment	8.30	*	*
P-132	Firing range	2.15	*	*
P-135	Disciplinary barracks	75	*	*
P-133	Brig addition	4.00	*	*
P-137	Morale, welfare and recreation facilities	14.20	*	*
P-139	Bowling alley I	*	*	2.70
P-140	Bowling alley II	*	*	2.10
P-141	Commissary/exchange	*	*	5.30
	Total	\$380.15*	\$271.99	\$376.94

*The A&E estimate does not include the four land acquisition projects, totaling \$61.44 million. The total A&E and land cost estimate is \$441.59 million.

Navy Estimates of Construction Costs at Staten Island, Everett, and Alternative Ports

DE, SAG, EMANVED AND BASIC PROGRAM COST COMPARISON SUMMARY - MILITARY/NAVY-APPROPRIATED CONSTRUCTION REQUIREMENTS
COST (\$M)

	Staten Island		Newport ^{1/}		Norfolk		Charleston		Charleston ^{2/} w/Patriots Pt.		Mayport ^{3/}
	Basic Program Costs	Enhanced Program Costs	Basic Program Costs	Enhanced Program Costs	Basic Program Costs	Enhanced Program Costs	Basic Program Costs	Enhanced Program Costs	Basic Program Costs	Enhanced Program Costs	
STEMWORK/LAND	24.530	24.6	6.2	6.2	0	0	0	0	1.7	1.7	
PIER/BULKHEADS	39.700	39.7	51.7	51.7	38.2	38.2	31.4	31.4	26.3	26.3	
WEDGING	0	0	5.5	5.5	0	0	62.4	62.4	39.1	39.1	
SIRNA/WATERFRONT OPS	27.000	27.0	12.3	22.9	0	0	5.4	5.4	5.4	5.4	
SUPPLY/PUBLIC WORKS	11.555	20.9	3.9	6.2	.8	.8	2.0	2.0	2.0	2.0	
ADMIN/TRAINING/SECURITY	0	15.8	0	3.9	0	.6	0	3.8	0	3.8	
COMMUNITY/PERSONNEL SUPPORT	17.600	35.6	3.9	7.3	.6	1.5	3.9	5.0	3.9	5.0	
DEQ/DOQ	13.700	13.7	5.2	5.2	0	0	3.1	3.1	3.1	3.1	
UTILITIES	53.785	54.5	25.8	26.5	3.9	4.1	4.2	4.2	3.8	3.8	
BRIDGE	0	0	0	0	0	0	400.0	400.0	0	0	
RF Frigates-Floyd Bennett	0	0	55.2	55.2	55.2	55.2	55.2	55.2	55.2	55.2	
SUBTOTALS	108.000	231.8	169.7	170.6	96.7	100.4	567.6	572.5	140.5	145.4	
NAVY SUPPORT (NAV)	8.500	13.8	.5	5.9	.2	2.5	.4	3.0	.4	3.0	
FAMILY HOUSING	30.400	59.4	29.1	50.2	17.6	37.7	19.5	41.8	19.5	41.8	
TOTALS	\$234,900	\$305.0	\$129.3	\$254.7	\$116.5	\$140.6	\$587.5	\$617.3	\$160.4	\$190.2	

NOTE: ^{1/} Severe land constraints. Will have to re-acquire portion of property previously exccessed or utilize Quonset Pt/Davisville. Split site basing would increase cost above Staten Island alternative.

^{2/} Requires remote split site and resultant support inconveniences.

^{3/} Mayport is not considered a viable option for homeporting the Bd SAG,

CYBG ENHANCED AND BASIC PROGRAM COST COMPARISON SUMMARY - MILITARY/NON-APPROPRIATED CONSTRUCTION REQUIREMENTS
COST (\$M)

	<u>Everett</u>		<u>San Diego</u>		<u>Long Beach</u>		<u>San Francisco</u>	
	Basic Program Costs	Enhanced Program Costs	Basic Program Costs	Enhanced Program Costs	Basic Program Costs	Enhanced Program Costs	Basic Program Costs	Enhanced Program Costs
SITework/LAND	76.240	76.2	0	0	0	0	0	0
PIER/BULKHEADS	57.500	97.4	55.4	77.6	17.3	60.6	60.5	85.6
DREDGING	32.400	32.4	0	0	2.1	2.1	0	0
SIWA/WATERFRONT OPS	26.062	30.9	6.6	17.0	7.0	32.6	7.0	15.0
SUPPLY/PUBLIC WORKS	11.070	19.1	2.0	2.0	1.6	3.6	1.1	2.2
ADMIN/TRAINING/SECURITY	7.470	10.2	1.6	1.6	2.3	4.5	2.9	5.4
COMMUNITY/PERSONNEL SUPPORT	0	20.5	0	11.2	0	9.9	0	9.4
BEQ/BOQ	19.800	19.8	6.6	6.6	6.6	6.6	9.1	9.1
UTILITIES	33.500	33.5	7.3	10.0	3.6	10.9	0.1	20.5
ROADS	0.000	0.0	1.1	1.1	2.0	2.0	0	0
NAF FFGs/In-line Warfare - Puget Sound	0	0	12.0	12.0	12.0	12.0	12.0	12.0
SUBTOTALS	272.000	340.0	93.4	141.5	56.1	145.6	101.5	160.0
NAF SUPPORT (NAF)	0	29.0	0	7.6	0	5.1	0	4.9
FAMILY HOUSING	0	0	79.7	105.3	131.7	132.8	151.1	177.1
TOTALS	\$272.000	\$377.0	\$173.1	\$254.4	\$187.8	\$283.5	\$252.6	\$342.0

Navy Summary Sheet on Operations and Maintenance and Other Procurement Costs at Staten Island, Everett, and Alternative Ports

SUMMARY SHEET OPERATIONS AND MAINTENANCE AND OTHER PROCUREMENT

EAST COAST BASIC PROGRAM:
(\$000, FY 1993)

	STATEN ISLAND	NEWPORT	NORFOLK	CHARLESTON	CHARLESTON W/PATRIOTS PT
SITE:					
O&M (BOS)	14202	3292	1815	2227	3511
Family Housing (O&M)	2150	1569	1697	1604	1604
OPN (CESE)	438	93	93	93	93
OPN (SIMA)	1400	650	0	280	280
NRF SITE:					
Floyd Bennett (O&M)	0	2410	2410	2410	2410
Floyd Bennett (CESE)	0	6	6	6	6
Floyd Bennett (SIMA)	0	400	400	400	400
TOTALS	18190	8420	6421	7020	8304

WEST COAST BASIC PROGRAM:
(\$000, FY 1993)

	EVERETT	SAN DIEGO	LONG BEACH	SAN FRANCISCO
SITE:				
O&M (BOS)	13306	1823	1962	2166
Family Housing (O&M)	0	5459	6317	11160
OPN (CESE)	413	167	167	167
OPN (SIMA)	1400	280	400	600
NRF SITE:				
Puget Sound (O&M)	0	275	275	275
Puget Sound (CESE)	0	5	5	5
Puget Sound (SIMA)	0	406	406	406
TOTALS	15119	8415	9532	14779

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